U.S. and EU Agricultural Support: Overview and Comparison

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Summary

The European Union (EU) is one of the United States' chief agricultural trading partners but also a major competitor in world markets. Both the United States and the EU provide significant government support for their agricultural sectors. According to the Organization for Economic Cooperation and Development (OECD), in 2009 the EU and the United States together accounted for 60% of all government support to agriculture among the major developed economies.

In the United States, federal farm policy has traditionally focused on price and/or income support programs concentrated on row crops including grains, oilseeds, and cotton, as well as sugar and dairy. In contrast, the EU provides more extensive support to a broader range of farm and food products—in addition to traditional row crops, sugar, and dairy, EU support also is extended to fresh and processed fruits and vegetables, and livestock products.

The EU's total agricultural support generally is much higher than in the United States, although actual support levels vary based on the definition of "agricultural support." For example, when using a broad, inclusive definition of the agricultural sector (one that encompasses rural development and consumer nutrition assistance), then, based on World Trade Organization (WTO) notification data for the 2006-2007 period, the EU government support averaged $119.7 billion per year compared with $86.2 billion by the United States, for a ratio of 1.4 to 1. When the comparison is limited to the most market-distorting types of direct farm subsidies during the same period, then the levels are smaller but the difference is much greater ($36.9 billion in EU outlays versus $10.1 billion in U.S. outlays, for a ratio of 3.6 to 1). When the definition of support includes non-monetary forms of support such as trade barriers and border measures, then the difference in support levels is still greater. For example, the OECD estimates that in 2009 the EU accounted for nearly half (48% or $120.8 billion) of all government support for agriculture (both monetary and non-monetary) among the major developed economies, compared with a 12% share ($30.6 billion) for U.S. agricultural support outlays (for a ratio of nearly 4 to 1).

Direct spending comparisons of agricultural support levels between the U.S. and EU are further complicated by significant structural differences in their respective farm sectors. The United States has more than double the farmland base (over 1 billion acres versus about 457 million acres in the EU), while the EU has more than six times the number of farms (13.8 million versus 2.2 million) spread across its 27 member countries. As a result, EU outlays per acre appear much larger than in the United States, whereas U.S. outlays per farm appear much larger than in the EU.

Since the 1980s, several policy trends have emerged in both the EU and United States, including (1) a decline of agricultural support as a share of gross farm receipts, (2) a decrease of support for market-distorting commodity price and income support programs, both in absolute terms and as a share of agricultural support, and (3) a substantial increase in support for less distorting non-commodity-type programs—e.g., extension, research, conservation, rural development, nutrition, and decoupled payments—now accounting for a majority share of total farm support.

Because the United States and the EU figure so dominantly in the development and use of agricultural policy on the global level, comparisons of the EU and U.S. farm support programs will likely continue to be of interest to Congress as the United States prepares to begin another round of domestic farm bill negotiations and the WTO Doha negotiations move forward.

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Introduction

The European Union (EU) is one of the United States' chief agricultural trading partners and also a major competitor in world markets for goods and services, as well as for farm products (**Table 1**).[1] As a destination, the EU accounted for 20% of total U.S. merchandise exports and 8% of U.S. agricultural-product exports during the 2008-2010 period. The EU ranked as the fifth most important destination for U.S. agricultural products behind Canada (17% share), Mexico (13%), China (12%), and Japan (11%) during that same period. However, as a source for U.S. agricultural-product imports, the EU ranked first, with a 22% share placing it ahead of Canada (20%), Mexico (15%), China (4%), and Brazil (3%).

Table 1. Comparison of U.S. and EU Average Trade Values for 2008-2010

(billion U.S. $)

	EU Trade with:			U.S. Trade with:		
	World	U.S.	U.S. Share	World	EU	EU Share
Total Exports[a]	$1,749	$319	18%	$1,207	$244	20%
Agr. Exports[b]	$116	$18	15%	$117	$10	8%
Total Imports	$1,987	$235	12%	$1,858	$323	17%
Agr. Imports	$122	$10	8%	$86	$19	22%

Source: Assembled by CRS from *Global Trade Atlas* database on March 2, 2011.

a. All commodities of all chapters of the Harmonized System (HS) code.

b. All commodities grouped according to the World Trade Organization definition of an agricultural product.

Both the United States and the EU provide significant government support to their agricultural sectors. According to the Organization for Economic Cooperation and Development (OECD), in 2009 the EU and the United States together accounted for 60% of all government support to agriculture among the major developed economies.[2] However, EU and U.S. farm program support differ in both size and scope, as well as in the manner in which the support is provided. In the United States, federal farm policy has traditionally focused on price and income support programs concentrated on row crops including grains, oilseeds, cotton, as well as dairy. In addition, the United States has provided substantial support to the sugar sector via supply management and import quotas. In contrast, the EU provides more extensive support to a broader range of farm and food products—in addition to traditional row crops, sugar, and dairy, EU support also is extended to fresh and processed fruits and vegetables, and livestock products.

[1] For more information on U.S. and EU economic relations see, CRS Report RL30608, *EU-U.S. Economic Ties: Framework, Scope, and Magnitude*, by (name redacted), and CRS Report R41652, *U.S.-EU Trade and Economic Relations: Key Policy Issues for the 112th Congress*, by (name redacted). A good source for general information on the EU's agricultural sector and policy framework is *European Union*, Briefing Room, ERS, USDA, at http://www.ers.usda.gov/Briefing/EuropeanUnion/.

[2] OECD, *Agricultural Policies in OECD Countries, at a Glance*, 2010, Table 1.3. Of the reported total 2009 Producer Support Estimate (PSE), five countries accounted for over 94% of total farm spending in developed countries: the EU at 48% ($120.8 billion), Japan at 18% ($46.5 billion), the United States at 12% ($30.6 billion), Turkey at 9% ($22.6 billion), and Korea at 7% ($17.5 billion).

The EU's total agricultural support generally is much higher than in the United States although actual support levels vary based on the definition of "agricultural support." For example, when using a broad, inclusive definition of the agricultural sector (one that encompasses rural development and consumer nutrition assistance), then during the 2006-2007 period the EU spent an average of $119.7 billion per year in total government outlays, compared with $86.2 billion by the United States for a ratio of 1.4 to 1 (**Table 2** and **Table 4**).[3] When the comparison is limited to the most market-distorting types of direct farm subsidies during the same period, then the levels are smaller but the difference is much greater ($36.9 billion in EU outlays versus $10.1 billion in U.S. outlays, for a ratio of 3.6 to 1). When the definition of support includes non-monetary forms of support such as trade barriers and border measures, then the difference in support levels is still greater. For example, the OECD estimates that in 2009 the EU accounted for nearly half (48% or $120.8 billion) of all government support for agriculture (both monetary and non-monetary) among the major developed economies, compared with a 12% share ($30.6 billion) for U.S. agricultural support outlays (for a ratio of nearly 4 to 1).[4]

In addition to the difficulties inherent in defining what constitutes support, or even what constitutes agriculture,[5] direct spending comparisons of agricultural support levels between the U.S. and EU also are complicated by significant structural differences in their respective farm sectors. The United States has more than double the farmland base (over 1 billion acres versus about 457 million acres in the EU), while the EU has more than six times the number of farms (13.8 million versus 2.2 million) spread across its 27 member countries (**Table 2**). As a result, EU outlays per unit of land appear much larger than in the United States, whereas U.S. outlays per farm appear much larger than in the EU.

The technological scale of agricultural production also varies dramatically across the EU's 27 member nations, thus adding to the difficulty of generalizing about EU farm policy effects in comparison with U.S. farm policy. Many of the EU's more recently added countries of Eastern Europe (**Table 3**) have been slow to adopt Western technology, in large part due to the extremely small size of their agricultural holdings. For example, the United States has 2.2 million farms with an average size of 418 acres per farm. This contrasts with Romania, which has nearly 4 million individual farm holdings with an average holding of about 9.4 acres, and Poland, which has another 2.4 million holdings averaging about 19 acres each. Even the more Western EU member country of Italy has 1.7 million farms with an average holding of about 23 acres. This small farm size limits the benefits from the economies of scale inherent in the advanced-technology agricultural production used in the United States.

[3] These data are from notifications made by individual countries to the World Trade Organization (WTO) and include the "Overall Total Domestic Support (OTDS)" plus "Green Box" outlays. These are described later in this report's section on WTO notifications. Data for the 2006-2007 period represent the most recently available period with comparable data for both the United States and the EU.

[4] These data are from OECD calculations of total Producer Subsidy Equivalents (PSEs) described later in this report's section on OECD PSEs.

[5] For example, the single largest outlay under U.S. agricultural support are payments made under the Supplemental Nutrition Assistance Program (SNAP), formerly known as food stamps. Meanwhile, billions of dollars of tax credits to U.S. ethanol blenders coupled with mandated biofuels usage under the Renewable Fuels Standard and a high import duty on certain foreign-produced ethanol—all of which provide substantial support for the U.S. corn sector—are excluded from U.S. agricultural support totals.

Table 2. U.S. versus EU: Comparison of General Economic Indicators

Indicator [sources are numbered 1–5]	Units	EU-27		United States	
Population (July 2010) [1]	**Million**	**492.4**		**310.2**	
Rural Share [2]	%		26.3%		18.0%
Growth Rate [1]	% per year		0.1%		1.0%
GDP-PPP[a] (2010) [1]	**Bil. U.S. $**	**$14,890**		**$14,720**	
Agriculture Share of GDP-PPP [1]	%		1.8%		1.2%
Labor Force (2010) [1]	**Million**	**225.2**		**153.9**	
Agr. labor force (and share) [1]	Million	12.6	5.6%	1.1	0.7%
Total Land Area (2008) [3]	**Mil. acres**	**1,033.2**		**2,264.0**	
Agricultural Land [3]	**Mil. ac. (%)**	**456.8**	**100%**	**1,016.1**	**100%**
Pasture [3]	Mil. ac. (%)	160.1	35%	588.1	58%
Seasonal Crops [3]	Mil. ac. (%)	266.7	58%	421.3	41%
Tree / Permanent Crops [3]	Mil. ac. (%)	30.0	7%	6.7	1%
Major Livestock Population (2008) [3]	**Mil. head**	**351.5**	**100%**	**167.9**	**100%**
Cattle [3]	Mil. head	91.1	26%	96.0	57%
Hogs [3]	Mil. head	156.0	44%	65.9	39%
Sheep [3]	Mil. head	104.4	30%	6.0	4%
Poultry Production (2008) [3]	**Mil. tons**	**8.7**		**17.0**	
Number of Farms[b] (2007) [4,5]	**Million**	**13.8**		**2.2**	
Average Farm Size (2007) [4,5]	**Acres**	**34.1**		**418.0**	
OTDS Outlays (2006-2007 average)[c]	**Mil. U.S. $**	**$36,914**		**$10,135**	
Per acre	U.S. $	$81		$10	
Per farm	U.S. $	$2,677		$4,597	
OTDS + Green Box Outlays[c]	**Mil. U.S. $**	**$119,748**		**$84,918**	
Per acre	U.S. $	$262		$85	
Per farm	U.S. $	$8,684		$39,112	

Source: Assembled by CRS from various sources, including [1] *CIA Fact Book*, CIA, U.S. Government; [2] *World Development Indicators*, World Bank; [3] *FAOSTATS*, FAO, U.N.; [4] *EUROSTAT*, European Commission; and [5] U.S. Agricultural Census of 2007, NASS, USDA.

a. GDP-PPP = Gross Domestic Product in Purchase Power Parity as calculated by the World Bank.

b. According to the U.S. Agricultural Census, a farm is defined as any place from which $1,000 or more of agricultural products were, or normally would be, produced and sold during the Census year. According to EUROSTAT an agricultural holding is a single unit both technically and economically, which has single management and which produces agricultural products. Other supplementary (non-agricultural) products and services may also be provided by the holding.

c. Overall Total Domestic Support (OTDS) and Green Box outlays are described later in this report under WTO notifications. Data are averaged for 2006 and 2007, the most recent comparable years. EU data are converted to U.S. dollars using an exchange rate of 0.766 Euros per U.S. dollar in 2006 and 0.681in 2007.

The EU also has a much larger commercial animal population, nearly double that of the United States, but with smaller average animal numbers per farm with animals. In general, the small size of EU farm holdings, their substantially larger number relative to the United States, and the generally larger share of rural population in the EU (26.3% versus 18%) has played a strong role in the formation of EU farm policy—it tends to have a stronger rural development flavor and allows frequent exemptions for identifiably small farming units from certain restrictions and payment limitations.

Because the United States and the EU figure so dominantly in the development and use of agricultural policy on the global level, information comparing the EU and U.S. farm support programs will likely continue to be of interest to Congress as the United States prepares for another round of domestic farm bill negotiations and the World Trade Organization (WTO) Doha negotiations move forward.

This report uses data from two public sources to compare agricultural support between the United States and the EU: (1) estimates of domestic support for agricultural programs based on WTO notifications; and (2) the OECD's country-level policy database. Each of these data sources uses a slightly different metric to evaluate agricultural support but arrives at very similar conclusions.

Overview of U.S. and EU Farm Programs

Both the United States and the EU have relied on similar policy instruments to support their respective agricultural sectors—price and income supports, direct payments to producers, supply controls, and border measures—although their implementation and the range of affected commodities has been fairly different over the years. To fully appreciate the current status of U.S. and EU farm policy, it is useful to briefly review the origins and evolution of their respective policies.

Agricultural Policy Origins

Current U.S. farm policy has its origins in the 1930s "Great Depression," when nearly 20% of Americans lived in rural areas and derived their livelihood either directly or indirectly from agriculture. As a result, the initial focus of U.S. farm policy was supporting commodity prices and rural incomes.

EU farm policy began later, following the devastation of World War II and the creation of the European Economic Community in the Treaty of Rome in 1958. During the late 1940s and early 1950s, Europe was confronted with serious food shortages. Although the shortages subsided by the mid-1950s, Europe remained a major importer of foodstuffs well into the 1970s; thus, the EU's initial policy focus was on ensuring adequate internal supplies.

Encouraging Surplus Production

The United States was a major beneficiary of Europe's large agricultural import needs during this early period. However, by the late 1950s, technological advances combined with relatively strong government price supports had led to the accumulation of large U.S. stocks of grains and cotton. In response, U.S. farm policy instituted supply management provisions in the 1960s including acreage planting restrictions and large global food aid donations for surplus removal.

The economic and commodity market crisis of the early 1970s helped to draw down global grain and oilseed stocks, sharply raised global commodity prices, and induced both the United States and the EU to ratchet up support for their respective agricultural sectors.[6] The United States instituted commodity-price targets that were linked to the cost of production, thus building in a self-inflating aspect that encouraged increasing support outlays and concomitant agricultural output independent of market conditions.

Mid-1980s Ushers in Period of Market-Oriented Reforms

By the mid-1980s, very generous price and income supports in both the United States and the EU had resulted in over-production and large stock accumulations (a substantial portion of which were government-owned). Burgeoning supplies in the United States and the EU—the world's two dominant grain stock holders—swelled global stocks to record levels, dampened global commodity prices, and created intense budgetary pressures for reform. Both nations recognized their dilemma but were hesitant to unilaterally undertake reforms for fear of losing market share in the very competitive international marketplace.

The United States began to slowly rein in direct farm support levels, starting with the 1985 farm bill (P.L. 99-198) which lowered Commodity Credit Corporation (CCC) price-support loan rates, froze income support target prices and program yields used to calculate per-acre payments, and introduced special marketing loan provisions for rice and cotton to avoid government stock ownership. Further reforms followed in the 1990 farm bill (P.L. 101-624)—acreage eligible for income support payments was reduced and acreage set-asides were tied to end-of-season stocks making them mandatory when stocks were too high relative to usage.

The EU initiated reforms to its agricultural policy starting with the MacSharry Reforms of 1992 (**Table 3**). The drive to reform farm policy by moving away from government supply management and towards a more liberalized market and trade environment was further crystallized in the legal texts of the World Trade Organization (WTO) in 1994 with the culmination of the Uruguay Round of multilateral trade negotiations. The Uruguay Round Agreement on Agriculture—adopted at the conclusion of the Uruguay Round of multilateral trade talks on April 15, 1994—marked a turning point in the history of the multilateral trading system by subjecting agricultural trade to essentially the same rules that discipline trade in industrial goods. In particular, WTO member countries made commitments to reduce domestic support to agriculture, reduce the use of export subsidies, and improve access to their markets.

Two years after completion of the Uruguay Round, the United States enacted the 1996 farm bill (P.L. 104-127) which made substantial changes towards greater market orientation in the design of U.S. agricultural policy. In addition to eliminating acreage reduction programs (ARPs) and most planting restrictions, as well as farmer-owned (but government financed) grain reserves, the 1996 farm bill also replaced the target-price deficiency payment program (a type of counter-cyclical income support program) with direct payments (a type of lump sum decoupled payment) and extended the use of special marketing loan repayment provisions (first begun for rice and cotton in the 1985 farm bill) to the other major program crops, thus effectively curtailing USDA's role in commodity storage and management.

[6] For more information, see Pete Riley, "Global Grain Markets in 1996: Shades of 1972-74?" *Agricultural Outlook*, AO-233, Economic Research Service, USDA, September 1996, pp. 2-6.

The EU also continued to increase the market-orientation of its own farm policy, in large part due to the looming enlargement eastward and the need to include millions of new farms under the Common Agricultural Policy. The EU's "Agenda 2000" reforms lowered support prices and replaced them with production-based direct payments. Subsequent reforms in 2003, inspired by the midterm review of Agenda 2000, continued the pattern of replacing government controls with greater market orientation. These were followed by reforms of support programs for hops and the so-called Mediterranean commodities (cotton, olive oil and tobacco) in 2004, sugar in 2006, and the wine sector in 2008 and 2009.

As a result, since the mid-1980s both the United States and the EU have steadily modified their farm programs in part by shifting away from traditional "trade-distorting" types of production-based price and income support programs and toward various types of less market-distorting "non-commodity" support, such as rural development and farmland conservation (or so-called "agri-environment") programs. Non-commodity support now constitutes the dominant share of total agricultural support, compared to production-based support, for both the United States and the EU—in the United States it comprises 88% of notified domestic support, compared with a 69% share in the EU (**Table 4**).

Many in Congress have historically defended U.S. farm support programs as a means to ensure that the United States has continued access to the "most abundant, safest, and cheapest food supplies in the world." European defenders of the CAP have made similar arguments for state-sanctioned intervention in the agricultural sector. Yet long-standing criticisms and continued debate have challenged the extent of and need for government support of farm programs. Some argue that the failure of the United States and EU to enact more substantial reform to their respective farm support programs has contributed to delays in the WTO's Doha Round of multilateral trade negotiations.

U.S. Agricultural Policy

Current U.S. farm support consists of programs that provide both direct and indirect support to producers and consumers and to the agricultural sector in general. For example, federal agricultural support continues to provide commodity price and income support, as well as agricultural trade, marketing, rural development, conservation support, and consumer food assistance.[7] These diverse policies are governed by an equally diverse set of laws. Many of these policies can be and sometimes are modified through freestanding authorizing legislation, or as part of other laws; however, the omnibus, multi-year farm bill (which comes up for renewal every five or six years) provides an opportunity for policymakers to address agricultural and food issues more comprehensively.[8] The most recent omnibus farm bill (P.L. 110-246, the Food, Conservation, and Energy Act of 2008) covers a range of areas, including commodity crops, horticulture and livestock, conservation, nutrition, trade and food aid, agricultural research, farm credit, rural development, energy, forestry, and other programs.

[7] For greater discussion about U.S. and EU rural development and conservation programs see CRS Report R40539, *Comparing U.S. and EU Program Support for Farm Commodities and Conservation*, by (name redacted), (name redac ted), and (name redacted).

[8] For more detailed information about U.S. farm policies and programs, see CRS Report RS22131, *What Is the "Farm Bill"?*, and CRS Report RL34696, *The 2008 Farm Bill: Major Provisions and Legislative Action*.

Commodity Price and Income Support Programs

The traditional "core" farm programs provide price and income support to producers of select "covered commodities" such as grains, oilseeds, and cotton in the form of both fixed direct payments and counter-cyclical assistance payments (CCP).[9] Producers of these and other commodities also are eligible for price support via commodity marketing loans and loan-related subsidies. Payments under both the marketing loan provisions and CCP are linked to current market prices—payments decline and eventually stop as market prices approach, then exceed commodity loan rates and the CCP target prices, or contrarily, payments will expand as market prices fall below support price targets. In addition, the dairy sector receives price support via government purchases of surplus dairy products at statutory prices, and income support via the Milk Income Loss Contract (MILC) program which makes direct payments to participating dairy farmers when the market price of farm milk in any month falls below a legislatively mandated target price.[10] Sugar is supported through a minimum pricing system that includes marketing allotments (which limit the amount of sugar that domestic processors can sell) and quotas to limit imports.[11]

Because price and income supports have payment triggers that depend on current market conditions, support levels tend to vary from year to year. But over time, average commodity support levels have remained fairly consistent. For example, shortly after the 2008 farm bill was passed, the Congressional Budget Office (CBO) estimated that the average cost of the commodity price and income support programs would be about $8.3 billion per year during the life of the 2008 farm bill (FY2008-FY2012).[12] In its most recent projections, CBO projects that U.S. commodity price and income support programs will average $6.9 billion per year during the FY2011 to FY2015 period.[13]

U.S. farmers may also be eligible for federally subsidized crop insurance and disaster assistance payments. CBO estimates that federal crop insurance outlays will average about $7.8 billion per year during the FY2011-FY2015 period. Actual outlays have varied with crop and market conditions, but have been relatively close to CBO projections.[14]

Conservation, Rural Development, and Nutrition

Starting with the 1985 farm bill (P.L. 99-198), Congress introduced programs intended to help producers adopt farming practices that preserve or enhance the environment. Conservation programs administered by USDA can be broadly grouped into land retirement and easement

[9] For more information, see CRS Report RL34594, *Farm Commodity Programs in the 2008 Farm Bill*, by (name redacted) Direct payments are decoupled from current production and instead are based on fixed historical production. CCP payments also are decoupled from current farm-level production, but are tied to the relationship between current national average farm prices and per-bushel or per-pound target prices.

[10] For more information see CRS Report RL34036, *Dairy Policy and the 2008 Farm Bill*, by (name redacted) and (name redacted).

[11] For more information, see CRS Report RL34103, *Sugar Policy and the 2008 Farm Bill*, by (name redacted).

[12] See CRS Report RL34696, *The 2008 Farm Bill: Major Provisions and Legislative Action* (Table 2). Averaged over FY2008-FY2012. These reported costs are mandatory outlays that do not require appropriations actions. The farm bill also authorizes discretionary programs that require appropriators to allocate funds that are not reflected in these costs.

[13] CBO January 2010 Baseline for CCC, FCIC, and Conservation, January 18, 2011.

[14] CRS Report R41195, *Actual Farm Bill Spending and Cost Estimates*, by (name redacted) and (name redacted).

programs and so-called "working lands" programs.[15] In general, land retirement and easement programs take land out of crop production and provide for program rental payments and cost-sharing to establish longer-term conservation coverage to convert the land back into forests, grasslands, or wetlands. Working lands programs provide technical and financial assistance to assist agricultural producers in improving natural resource conservation and management practices on their productive lands. In addition, aside from some long-standing rural business and community programs, the 1996 and 2002 farm bills, as amended, included several new rural development programs intended for infrastructure improvements, community services, and business development.[16] The 2008 farm bill also expanded these overall program areas by creating new farm conservation and rural development programs mainly in the bioenergy area.[17] CBO estimated that the average cost of the mandatory conservation and rural development programs would be about $4.8 billion per year under the 2008 farm bill.[18]

The largest component of U.S. agricultural support is domestic food assistance. Authorized under Title IV of the 2008 farm bill (P.L. 110-246), this includes domestic food and nutrition and commodity distribution programs, mainly the supplemental nutrition assistance program (SNAP, formerly known as food stamps).[19] CBO estimated that the average cost of the Nutrition Title IV would be about $37.8 billion per year during the life of the 2008 farm bill (FY2008-FY2012).[20] However, actual participation in SNAP and other nutrition programs has exceeded expectations due to a downward shift in economic conditions and changes in the pool of eligible participants.

Rural development, conservation, and nutrition programs are generally viewed either as benign from a market perspective or meritorious from a social perspective. As a result, there has not been the same emphasis on reform or down-sizing of these types of non-commodity programs compared with commodity-specific price and income support programs in recent years.

EU Agricultural Policy

The Common Agricultural Policy (CAP) governs agricultural policies and programs for the EU's 27 member countries. Established in 1962, the CAP was based on three major principles:

- a *unified market* in which there is a free flow of agricultural commodities with common prices within the EU;
- *product preference* for domestic production in the internal market over foreign imports through common customs tariffs; and
- financial solidarity through *common financing* of agricultural programs.

[15] For more information, see CRS Report RL34557, *Conservation Provisions of the 2008 Farm Bill*, by (name re dacted), (name redacted), and (name redacted)

[16] CRS Report RL31837, *An Overview of USDA Rural Development Programs*, by (name redacted).

[17] For more information, see CRS Report RL34126, *Rural Development Provisions of the 2008 Farm Bill*.

[18] See CRS Report RL34696, *The 2008 Farm Bill: Major Provisions and Legislative Action* (Table 2). The annual amount is averaged over FY2008-FY2012. The farm bill also authorizes discretionary programs that are not reflected in these costs. Funding for conservation represents the majority of this estimate, with funding for rural development estimated at under $40 million per year.

[19] CRS Report RL33829, *Domestic Food Assistance and the 2008 Farm Bill*, by (name redacted).

[20] See CRS Report RL34696, *The 2008 Farm Bill: Major Provisions and Legislative Action* (Table 2). Averaged over FY2008-FY2012. These reported costs are mandatory outlays that do not require appropriations actions.

The CAP's original objectives were to increase agricultural productivity, ensure fair living standards for farmers, stabilize markets, ensure the availability of food, and provide food at reasonable prices.[21]

These aims were achieved primarily by the EU intervening in commodity markets to buy farm output when market prices fell below agreed target prices. To prevent imports from undercutting the high internal prices that resulted from the operation of the intervention buying system, the EU levied variable tariffs on imported agricultural products. Export subsidies were used to eliminate the surpluses of agricultural products that resulted from the high internal prices of the intervention buying system. The system of intervention buying, import levies, and export subsidies was carried out in various common market organizations (CMOs) for bananas, cereals, floriculture, dried fodder, fruits and vegetables, hops, olive oil and table olives, flax and hemp, eggs, pork, milk products, rice, seeds, sugar, tobacco, beef and veal, sheep meat and goat meat, wine, poultry meat, and other agricultural products.

Among the unintended consequences of the CAP were high prices for consumers and high budget expenditures. During the 1970s and 1980s, the CAP accounted for as much as 70% of the total EU budget. The CAP was also criticized by EU trading partners for distorting world markets and interfering with global agricultural trade. As the EU expanded from its original six member countries formed by the 1958 Treaty of Rome to 12 members in 1986, the generous support programs of the CAP resulted in ever-increasing budget outlays. By the early 1990s, with further enlargement looming, the EU felt compelled to undertake a series of reforms in an effort to reduce its budgetary liability (**Table 3**). The prospect of enlarging eastward towards larger countries with smaller and poorer farm households heightened the urgency of EU reform.

The CAP Moves Toward Greater Market Orientation

Since 1992, the EU has implemented policy changes that move the CAP toward support that is more market-oriented and decoupled from current production and prices. The changes also reduced the budgetary costs of the CAP and have brought EU agricultural policy more in line with WTO rules and restrictions. More recently, the evolution of the CAP has been influenced by other objectives (than those mentioned in the Treaty of Rome) such as maintaining the quality of rural life, improving the environment, and protecting animal welfare.

Reforms in 1992 (the MacSharry Reforms) and 2000 (Agenda 2000) reduced EU commodity support prices toward market levels (compensated by production-based direct payments) and required that some farmland be taken out of production. Budget disciplines designed to reduce the growth in community spending on the CAP were established in 2002.

In 2003 another round of CAP reforms (otherwise known as the Midterm Review or 2003 Reforms) established two pillars in the EU's agricultural budget: Pillar I for direct payments and market and price support policies (financed entirely from the EU budget), and Pillar II for rural development policies (co-financed with EU member states).[22] In the 2003 reforms, a ceiling was imposed on Pillar I spending; increases are limited to 1 percent per year in nominal terms from

[21] These were the objectives for a common agricultural policy, enumerated in Article 39 of the 1958 Treaty of Rome, establishing the original six-country European Economic Community.

[22] Briefing Room, "European Union: Common Agricultural Policy," ERS , USDA, available at http://www.ers.usda.gov/Briefing/EuropeanUnion/policy.htm.

2007-2013. The budget for rural development was intended to more than double by 2013, but budget restrictions have substantially limited Pillar II spending. In addition, the receipt of farm income support was made contingent upon the farmer meeting an extensive array of agricultural and environmental norms that were introduced in 2003.

Table 3. Chronology of EU Enlargement and CAP Reforms

Year	Event
1958	**Treaty of Rome** establishes original 6-country European Economic Community—France, West Germany, Italy, the Netherlands, Belgium, and Luxembourg
1962	**CAP** was first implemented based on high internal support prices, effective border controls on imports, and the use of export subsidies to push domestic surpluses into international markets.
1973	United Kingdom, Ireland, and Denmark join the EU.
1981	Greece joins the EU.
1986	Spain and Portugal joined to form the EU-12.
1989	East Germany was unified with West Germany.
1992	**MacSharry Reforms** reduced intervention prices and introduced set-aside and production-based direct payments to compensate for lower support prices.
1995	Austria, Finland, and Sweden join to form the EU-15. Rural development programs introduced.
2000	**Agenda 2000** further reduced intervention prices (again compensated by further production-based direct payments); made rural development a second pillar of the CAP.
2002	CAP budget fixed at 1% annual growth for the period 2007-2013.
2003	A mid-term review of Agenda 2000 resulted in another round of reforms referred to as the **2003 Reforms**. The single farm payment (SFP) was established, dependent on environmental and stewardship criteria. The decoupled SFP—based on historical 2000-2002 payments—replaced the production-based direct payments of the MacSharry and Agenda 2000 reforms.
2004	**Reform of Hops and Mediterranean commodities** (cotton, olive oil, and tobacco).
	EU-15 expands to the EU-25 with the addition of Poland, Hungary, the Czech Republic, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Cyprus, and Malta.
2006	**Reform of the EU sugar program** was begun in July 2006.
2007	EU-25 expands to the EU-27 with the addition of Bulgaria and Romania.
2008	**CAP Health Check of 2008** builds on earlier reforms to simplify the SFP, abolish arable set-aside, increase milk quotas gradually leading up to their abolition in 2015, and other changes.
	Reform of the EU wine support programs were begun in 2008 and completed in 2009.

Source: Compiled by CRS from various sources.

In 2004 the EU undertook reform of programs supporting hops and the so-called Mediterranean commodities—cotton, olive oil, and tobacco. In 2006, reform of the EU sugar program was initiated. Reform of the EU wine sector was begun in 2008 and completed in 2009. Finally, the 2008 CAP Health Check built on the 2003 reforms as it simplified the CAP's direct aid system, established a process for shifting funding from direct aid to rural development (referred to as modulation), clarified support for newly acceded countries, increased milk quotas gradually leading up to their abolition in 2015, as well as dealing with other issues.[23]

[23] European Commission (EC), "'Health Check' of the Common Agricultural Policy," http://ec.europa.eu/agriculture/ (continued...)

Two Pillars of the Reformed CAP

The major component of the first pillar of the CAP (direct aid and market support) is the decoupled single farm payment (SFP). Introduced in 2003, the SFP replaced production-based payments made under various commodity-specific common market organizations (CMOs). As a result, the SFP largely decoupled support from current prices or production. EU member countries could opt to temporarily maintain a limited link between payments and production (partial decoupling), but had to move to full decoupling. The 2008 CAP Health Check eliminated partial decoupling for all but a few (livestock) commodities by 2012.

Total reported spending for the EU's farm programs—including direct aid and support for conservation and rural development—is estimated at nearly $79.2 billion (€56.4 billion) for 2011, and accounts for nearly 45% of the EU's projected 2011 budget.[24] Reported spending for "direct aids," covering SFP, is estimated at about $60.1 billion (€42.8 billion) for 2011.

In order to receive the SFP, a farmer must comply with certain environmental and agricultural measures. Referred to as "cross-compliance," this obligation entails keeping farmland in good agricultural and environmental condition and observing mandatory management requirements. The requirements are included in regulations established for groundwater protection, water pollution from nitrates, pesticide use, and the protection of habitats for flora and fauna. These agricultural and environmental practices are often referred to as "good agricultural practices" or GAPs.[25] Non-compliance is sanctioned by a reduction in direct payments.

Rural development policy (Pillar II) focuses on three identified areas: competitiveness for farming and forestry; environment and countryside; and quality of life and diversification of the rural economy.[26] Activities under the second pillar are designed and co-financed by member countries. Within member states, the EU funds 75% of the cost of rural development activities, and 90% in poorer areas. Increased spending on rural development is financed by modulation—reducing the pillar-one direct payments to larger farmers and transferring the funds to rural development. From 2007 onward, direct payments to individual farmers of €5,000 and higher are reduced by 5% to finance rural development.

Spending on the EU's "rural development" programs, which include agri-environmental programs, is estimated at about $19 billion (€13.5 billion) for 2011.[27] Overall, CAP spending for rural development represents about 24% of total EU agricultural spending. Direct farm spending, including the SFP, accounts for about 70% of the CAP. The remaining budget is spent on other farm programs and administration. CAP spending is subject to a financial discipline mechanism designed to keep spending on direct aid and market support (pillar one) in line with budget

(...continued)

healthcheck/index_en.htm.

[24]Projected payments under "The EU Budget 2011 – The Figures," Financial Programming and Budget, European Commission (EC), at http://ec.europa.eu/budget/budget_detail/current_year_en.htm. Converted by CRS from € (euro) to U.S. dollars using annual average nominal exchange rate of 0.712 euro per dollar.

[25] Annex IV of Council Directive (EC) No 1782/2003, viewed at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003R1782:EN:NOT.

[26] See Council Decision of February 20, 2006, on "Community strategic guidelines for rural development (2007 to 2013)," at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006D0144:EN:NOT.

[27] Projected payments under "The EU Budget 2011 – The Figures," Financial Programming and Budget, EC.

ceilings agreed to in 2002. If overspending on direct aids is forecast, then direct aids are reduced to ensure that the budget is not exceeded.

Comparing Support Across Countries

As a general rule, since the mid-1980s total farm sector support (measured in annual outlays) in the United States has increased substantially while outlays in the EU have declined slightly. However, there are several similar policy trends in both the EU and United States:

- agricultural support has declined as a share of total gross farm receipts,
- support for market-distorting commodity programs has decreased both in absolute terms and as a share of agricultural support, and
- support for less distorting non-commodity-type programs—e.g., conservation, rural development, agro-forestry, nutrition, and bioenergy—has increased substantially and now accounts for a majority share of total farm support.

WTO Notifications of Domestic Agricultural Support

WTO member countries periodically provide (or "notify") their outlays in support of domestic agriculture to the WTO, as part of each country's commitments agreed to at the time of the Uruguay Round Agreement on Agriculture.[28] A primary policy goal of the WTO's Agreement on Agriculture was to design member-country commitments to encourage a gradual shift in domestic agricultural policy away from programs that are market and trade distorting and towards more benign (i.e., non- or less-distorting) types of programs. The primary purpose of the notification data is to monitor how a country is doing in terms of bringing domestic support for its agricultural sector into compliance with the agreed-upon WTO limits of domestic support.

The AMS and Domestic Spending Categories

The Agreement on Agriculture commits countries to discipline their domestic farm subsidies primarily by establishing an annual dollar limit on those policies determined to have the greatest potential to distort markets, while allowing exemptions for less distortive policies. Reduction commitments are expressed in terms of a total "aggregate measurement of support" (AMS)[29] that includes all product-specific and non-product-specific support for a country's agriculture sector in one single figure. The AMS reflects the monetary value of domestic or "internal" publicly funded farm support, and is subdivided into three colored boxes and two "de minimis" exclusion categories, each with their own specific limit: [30]

1. **Amber box programs** include payments contingent on participation in agricultural production. As a result, these are the most market-distorting types of

[28]For more information see CRS Report RL32916, *Agriculture in the WTO: Policy Commitments Made Under the Agreement on Agriculture*, by (name redacted).

[29] Also commonly referred to as the "aggregate measure of support."

[30] For more background, see CRS Report RS20840, *Agriculture in the WTO: Limits on Domestic Support*, by (name redacted). Also see the WTO's website at http://www.wto.org/english/tratop_e/agric_e/ag_intro3_domestic_e.htm.

programs. Examples are U.S. price supports for dairy (including MILC payments) and sugar; U.S. marketing loan and CCP benefits for grain, oilseed, and cotton producers; and EU intervention purchases of farm products at administratively maintained prices above market prices. Amber box payments are subject to WTO reduction commitments.

2. **Blue box programs** are direct payments made under a production-limiting program. These programs are considered less-market distorting than amber box programs because of their production limiting aspect. Examples are EU direct payments to producers based on fixed areas or yields or a fixed number of livestock. There are currently no U.S. blue box programs. Blue box programs are not subject to WTO disciplines or reductions.
3. **Green box programs** are payments that are only minimally market-distorting. Examples are research programs, environmental program payments, disaster assistance, or direct payments to farmers that are not contingent on production. Green box payments do not require WTO disciplines or reductions, and do not count against a country's subsidy ceiling.
4. **De minimis exemptions** pertain to "small" levels of domestic support, no matter what their nature, that are deemed sufficiently benign (i.e., not likely to distort trade) to be excluded from the AMS calculation. They include commodity-specific support (i.e., support that applies to a specific product such as wheat, sugar, etc.) and non-product-specific support (e.g., irrigation and U.S. crop insurance subsidies). If total non-product-specific subsidies are below 5% (10% for developing countries) of the value of a developed country's total agricultural production, then they do not have to be included in the AMS calculation. Similarly, product-specific support is limited to 5% (10% for developing countries) of the value of that product's annual output.

The AMS data provide a comprehensive accounting of farm program support. Like the OECD's PSE calculation (described below), the AMS includes support for all program areas and all commodities, even those that are supported through indirect price supports such as import quotas and tariffs. For example, the primary method of support provided under the U.S. dairy and sugar programs are non-price mechanisms such as government purchases (dairy) and marketing quotas and import barriers (sugar).[31] Yet the AMS captures this support as part of its overall estimate by measuring the price difference between the domestic and international prices, then applying it to annual production.

The principal limitation of the AMS data is the substantial lag in reporting from WTO members. The most recent U.S. notification reflects agricultural support through the 2008 marketing year, while the most recent EU notification covers marketing year 2007.[32] Accordingly, comparable data on the United States and the European Union is available for the 13-year period 1995 through 2007. Another encumbering factor is that, during this period, the EU expanded from 15 to 27 members making the EU historical data over time representative of changing membership.

[31] U.S. dairy producers may also receive payments under the Milk Income Loss Contract (MILC) program.

[32] The most recent U.S. notification is WTO, Committee on Agriculture, "Domestic Support: United States," G/AG/N/USA/77, October 12, 2010. The most recent EU notification is WTO, Committee on Agriculture, "Domestic Support: European Communities," G/AG/N/EEC/68, January 24, 2011.

The available AMS data are also limited because of differences in policy priorities, as well as reporting and accounting differences in farm programs between the United States and the EU. For example, the United States' "green box" payments differ from the EU's in that the U.S. includes "domestic food aid," which includes food stamps, and other domestic food and child nutrition programs (**Table 4**). In addition, internal shifts among categories between reporting periods also complicate a direct or historical comparison. For example, prior to 2002 the U.S. notification classified the Conservation Reserve Program (CRP), as a "resource retirement program," whereas since 2002 it has been classified as an "environmental payment." This type of change can distort historical trends and period averaging of the available data, understating U.S. spending on conservation programs prior to 2002.

U.S. Commodity Support Has Declined and Shifted Focus

During the 1995 to 2005 period, the United States averaged $10.7 billion annually in commodity-type (or amber box) support with four commodity groups receiving the majority of support—dairy (45%), grains, pulses, and oilseeds (31%), sugar (11%), and cotton (11%) (**Table 4**). By the 2006 to 2007 period, program changes coupled with high commodity prices had lowered annual average U.S. amber box support by 35% to $7 billion with the dairy and sugar programs assuming much larger shares of support, 72% and 18%, respectively.

Also, the United States experienced a substantial decline in its use of *de minimis* and blue box exemptions over the same two time periods, declining from a combined annual average of $5.7 billion in 1995-2005, to $3.1 billion in 2006-2007. As a result, the U.S. Overall Total Domestic Support (OTDS) declined by 38% from $16.5 billion to $10.1 billion.[33] These reductions in domestic support, if sustained, represent a significant decline in the most market-distorting types of U.S. domestic support, and would bring the U.S. level within the limits proposed under the current Doha negotiating texts.[34]

Similarly, EU Has Decreased and Redirected Commodity Outlays

EU amber box support averaged $45.4 billion annually during the 1995 to 2005 period, substantially larger than their U.S. counterpart's $10.7 billion annual average. However, EU commodity payments have been more broadly dispersed than U.S. commodity support. EU commodity support has been spread across dairy, sugar, grains and oilseeds, fruits, vegetables, olive oil, and wine. Unlike in the United States where fresh and processed fruits and vegetables are largely excluded from market support, these products (along with olive oil and wine) represented 31% of EU amber box outlays. Other EU product sectors receiving substantial amber box support during the 1995 to 2005 period were livestock (18%), grain products (18%), sugar (15%), and dairy (13%) (**Table 4**).

[33] OTDS is a new domestic support spending category developed during the Doha Round of WTO trade negotiations. OTDS combines amber box, blue box, and both de minimis exemptions into a single spending category. For more information see CRS Report RL33144, *WTO Doha Round: The Agricultural Negotiations*.

[34] Under the Doha Round's current working texts the proposed limit on annual U.S. OTDS outlays declines to about $14.46 billion from the 1995-2000 average level of about $48.2 billion, the amber box limit declines from $19.1 billion to $7.6 billion, and each of the two de minimis and the blue box categories decline from about $10 billion to about $5 billion. See the WTO's *Unofficial Guide To The Revised Draft Modalities—Agriculture*, December 6, 2008.

Table 4. Total Domestic Support and "Green Box" Payments for Agriculture, United States and European Union

(in U.S. $ billions)

Domestic Agriculture Support Category	U.S. Average				EU Average			
	1995-2005		2006-2007		1995-2005		2006-2007	
Amber box[a]	**10.7**	**(100%)**	**7.0**	**(100%)**	**45.4**	**(100%)**	**26.4**	**(100%)**
Dairy	*4.9*	*(45%)*	*5.0*	*(72%)*	*6.1*	*(13%)*	*5.7*	*(21%)*
Sugar	*1.1*	*(11%)*	*1.3*	*(18%)*	*6.7*	*(15%)*	*7.0*	*(27%)*
Grains, Pulses, & Oilseeds	*3.4*	*(31%)*	*0.0*	*(0%)*	*7.1*	*(16%)*	*5.9*	*(22%)*
Cotton	*1.2*	*(11%)*	*0.7*	*(10%)*	*0.8*	*(2%)*	*0.0*	*(0%)*
Fruits, Vegetables, Olive Oil, & Wine	*0.0*	*(0%)*	*0.0*	*(0%)*	*14.3*	*(31%)*	*7.2*	*(27%)*
Livestock	*0.0*	*(0%)*	*0.0*	*(0%)*	*8.0*	*(18%)*	*0.0*	*(0%)*
Amber de minimis	**5.1**		**3.1**		**1.3**		**3.0**	
Product Specific	*0.3*		*0.2*		*0.8*		*1.5*	
Non-Product Specific	*4.8*		*2.9*		*0.4*		*1.4*	
Blue box	**0.6**		**0.0**		**24.2**		**7.5**	
Overall Total Dom. Support (OTDS)	**16.5**		**10.1**		**70.8**		**36.9**	
Green box	**55.6**		**76.1**		**25.5**		**82.8**	
General services	*8.7*		*10.8*		*6.0*		*9.4*	
Public stockholding for food security	*0.0*		*0.0*		*0.0*		*0.1*	
Domestic food aid	*38.3*		*54.3*		*0.3*		*0.8*	
Decoupled income support	*5.0*		*6.1*		*1.9*		*43.0*	
Income insurance and safety-net progs.	*0.0*		*0.0*		*0.0*		*0.0*	
Payments for relief from natural disasters	*1.2*		*1.0*		*0.5*		*1.5*	
Structural adj.: prod. retirement progs.	*0.0*		*0.0*		*0.8*		*1.1*	
Structural adj.: resource retirement progs.	*1.0*		*0.0*		*0.5*		*0.6*	
Structural adj.: investment aids	*0.1*		*0.1*		*6.7*		*8.5*	
Environment payments	*1.2*		*3.8*		*5.4*		*8.2*	
Payments under regional asst. progs.	*0.0*		*0.0*		*3.1*		*5.8*	
Other	*0.0*		*0.0*		*0.4*		*3.8*	
OTDS + Green box	**72.0**		**86.2**		**96.3**		**119.7**	

Source: CRS calculations from EU and US notifications: WTO, Committee on Agriculture; available at http://www.wto.org/english/tratop_e/agric_e/ag_work_e.htm.

Notes: EU values are converted by CRS using euro exchange (nominal) rates compiled by the USDA's Economic Research Service (ERS), at http://ers.usda.gov/Data/ExchangeRates.

a. These figures represent both taxpayer-paid subsidies in the form of direct payments, as well as consumer-paid subsidies such as under the U.S. sugar program which supports the domestic price of refined sugar above international market prices through import quotas.

However, following the series of commodity-targeted reforms implemented during the 1990s and early 2000s (**Table 3**), the EU has decreased amber-box, commodity-oriented support by 42% to

an annual average of $26.4 billion during the 2006-2007 period with the sugar, grain and oilseeds and dairy sectors receiving larger shares of support—27%, 22%, and 21%, respectively.

The EU also experienced a substantial decline in its use of the blue box exemption over the same two time periods, declining 69% from an annual average of $24.2 billion in 1995-2005, to $7.5 billion in 2006-2007. In contrast, EU spending under *de minimis* exemptions more than doubled rising from $1.3 billion to $3 billion. As a result of its policy reforms, the EU's annual average OTDS has declined 48% from $70.8 billion to $36.9 billion.

However, the budgetary effect of many of the EU reforms did not start to kick in until 2007. Looking just at EU domestic support for 2007, the data suggest even greater support reductions than implied by the 2006-2007 period average. For example, EU amber box support was $18.1 billion (€12.4 billion) in 2007, while OTDS outlays were $29.2 billion (€19.9 billion). These reductions in domestic support, if sustained, represent a significant decline in the most market-distorting types of EU domestic support, and would bring the EU level within the limits proposed under the current Doha negotiating texts.[35]

Both United States and EU Have Expanded Green Box Spending

Comparing available green-box spending for the United States and the EU, averaged over the two periods, 1995-2005 and 2006-2007, suggests that several dramatic policy trends have occurred (**Table 4**).

First, the EU has overtaken the United States as the world's foremost user of green-box-type programs. During the 1995-2005 period, U.S. green-box outlays were nearly double those of the EU's—$55.6 billion versus $25.5 billion. However, by the 2006-2007 period the EU had more than tripled its average annual green-box spending to $82.8 billion while U.S. green-box outlays had risen by 37% to $76.1 billion.

Second, for both the United States and the EU the bulk of agricultural support is now Green-Box programs (i.e., not subject to WTO disciplines).[36] U.S. green-box support has risen from a 77% share of total agricultural support during the 1995-2005 period, to an 88% share in 2006-2007. Similarly, green-box outlays in the EU have risen from a 27% share to a 69% share over the two periods.

Third, the green-box spending trends described in the first two points for both the United States and the EU are due primarily to changes in outlays for the major green-box category of each nation—domestic food aid (i.e., primarily SNAP (or food stamp) outlays) for the United States and decoupled income support (i.e., single farm payments (SFP)) for the EU. Domestic food aid in the United States has risen by 42% between the two periods—from $38.3 billion to $54.3

[35] Under the Doha-Round working texts, the proposed limit on EU annual OTDS outlays (based on 15 members) declines from €110.3 billion during the 1995 to 2000 period to €22.06 billion, and the EU's current amber box ceiling of €67.16 billion would decline to €20.1 billion. EU limits would ultimately have to be adjusted upward to reflect its current 27 members. For more information, see the WTO's *Unofficial Guide To The Revised Draft Modalities—Agriculture,* December 6, 2008.

[36] Some WTO member countries criticize the EU and U.S. green-box payment claims. See, e.g, Bhaskar, A., and J.C. Beghin, "How coupled are decoupled farm payments? A review of coupling mechanisms and the evidence," Iowa State University, Working Paper # 07021August 22, 2007, http://www.econ.iastate.edu/research/webpapers/paper_12841_07021.pdf.

billion as both benefits and eligibility have expanded over time.[37] EU decoupled income support has grown even more dramatically from $1.9 billion to $43 billion as the EU has relied heavily on the use of the SFP to move away from commodity price supports.[38]

Fourth, the United States provides less support than the EU for both environmental programs and rural development programs under the green box, but substantially more for domestic food aid (**Table 4**). As already mentioned, in 2002 the United States reclassified the Conservation Reserve Program (CRP) as an "environmental payment" whereas previously it was classified under "resource retirement programs." Given that these data are averaged over the 1995-2005 period, average U.S. environmental payments ($1.2 billion) can be combined with "resource retirement programs" payments ($1 billion) to better capture the inclusion of CRP in earlier years. The combined U.S. value of $2.2 billion is substantially lower than the EU's combined $5.9 billion. For the more recent period, 2006-2007, the difference in environmental payments is even more significant: U.S. environmental payments averaged $3.8 billion per year, compared to the EU's $8.2 billion.

Rural development outlays may be approximated by combining payments under "regional assistance programs" and "investment aids." EU average outlays of $9.8 billion and $14.3 billion for the two time periods compare with U.S. average outlays of $0.1 billion for both periods. This does not provide a comprehensive accounting of rural development outlays since U.S. payments are slightly higher for agricultural research, extension, regulatory, and technical services under the "general services" category. However, EU rural development spending is clearly substantially larger than its counterpart U.S. outlays.

OECD's Producer Support Estimates (PSEs)

An inherent weakness in WTO member-notification data is that each country is allowed to identify and categorize its various support programs according to its own interpretation of the WTO criteria on domestic support. An alternate source of farm program support among major developed economies is the OECD's policy data base and accompanying annual publication *Agricultural Policies in OECD Countries*, which describes and evaluates agricultural policies in each of the OECD countries.[39] OECD analysts have developed a methodology to evaluate and classify the various types of agricultural support programs of major developed countries in a more consistent fashion both across countries and over time. In addition to being more consistent, the OECD data also provides for a longer time series from 1986 through 2009.

OECD aggregates agricultural policy support levels according to several types of criteria, two of which are used in this report for cross-country comparisons:

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[37] For more information see CRS Report RL33690, *Food Stamps and Nutrition Programs in the 2002 Farm Bill*, by (nam e redacted).

and CRS Report R41374, *Reducing SNAP (Food Stamp) Benefits Provided by the ARRA: P.L. 111-226 and P.L. 111-296*, by (name redacted), (name redacted), and (name redacted).

[38] SFPs are fixed farm payments that were based on 2000-2002 historical farm payments and replaced the compensation payments of the 1992 CAP reforms. For information on decoupled support, see the text on the Uruguay Round Agreement, Agreement on Agriculture, Annex 2.6 (decoupled income support), available at the WTO's website, http://www.wto.int/english/docs_e/legal_e/14-ag_02_e.htm#annII6.

[39] The 2010 OECD report is *Agricultural Policies in OECD Countries: At a Glace 2010*. For information on how these estimates are compiled, see *Agricultural Policies in OECD Countries: Monitoring and Evaluation 2009.*

- the producer support estimate (PSE),[40] and
- general services support estimates (GSSE).

The PSE reflects the value of all policy measures (both explicit and implicit) that support agriculture. OECD defines the PSE as "an indicator of the annual monetary value of gross transfers from consumers and taxpayers to support agricultural producers, measured at farm gate level, arising from policy measures, regardless of their nature, objectives or impacts on farm production or income."[41] This measure includes production-based support (commodity price supports, payments related to input use, and payments based on various current and historical criteria including area planted, animal numbers, receipts, and income), two payment categories where no production is required (based on historical criteria or on other non-commodity criteria such as long-term resource retirement), and a miscellaneous category. The PSE measure includes most conservation payments as well as the EU's SFP and the U.S. direct payment; however, it does not include domestic food assistance and nutrition program payments which are instead included in the GSSE (defined below).

While the PSE data are initially available as values (expressed in units of each country's domestic currency), OECD also expresses the PSE as a percentage of the value of gross farm output to avoid the issues associated with exchange rate fluctuations when making comparisons of agricultural support across countries.

The definition of PSE "non-commodity outputs" is closely related to the concept of "multi-functionality," which is widely acknowledged in the EU and builds on the idea that agriculture has many functions in addition to producing food and fiber. These positive attributes include environmental protection, landscape preservation, biodiversity, rural viability and employment, animal welfare, food safety and quality, and food security.[42] Typically, non-commodity outputs of agriculture satisfy two conditions: they are jointly produced with commodity outputs, and they provide social value (and impose social costs) not reflected in markets.[43]

The General Services Support Estimates (GSSE) measures the value of support that is intended to benefit the agricultural sector in general and includes policy areas such as extension, research and development, infrastructure, marketing and promotion of agricultural products, public stockholding, training, and inspection services. In addition, GSSE includes domestic food assistance programs and other consumer-directed nutrition programs that support demand for food products. Thus, GSSE support is similar to the WTO Green Box with the major exception of decoupled payments which are included in the PSE. As with the PSE, GSSE may also be expressed as a percentage of the value of gross farm output.

The OECD's policy database extends from 1986 to 2009, thus allowing for a longer historical perspective of the effects of policy reforms over time than are available from WTO notification

[40] Formerly known as the "Producer Subsidy Equivalent (PSE)."

[41] OECD, Glossary of Statistical Terms, "Producer Support Estimate (PSE)", http://stats.oecd.org/glossary/detail.asp?ID=2150.

[42] WTO, Glossary term: Multifunctionality, http://www.wto.org/english/thewto_e/glossary_e/multifunctionality_e.htm.

[43] See, e.g., R. N. Boisvert and D. Blandford, "Multifunctionality and Non-trade Concerns: Implications for Future Agricultural Policy in Asia;" and Peterson et al., "Environmental policies for a multifunctional agricultural sector in open economies," *European Review of Agricultural Economics*, vol. 29 (4).

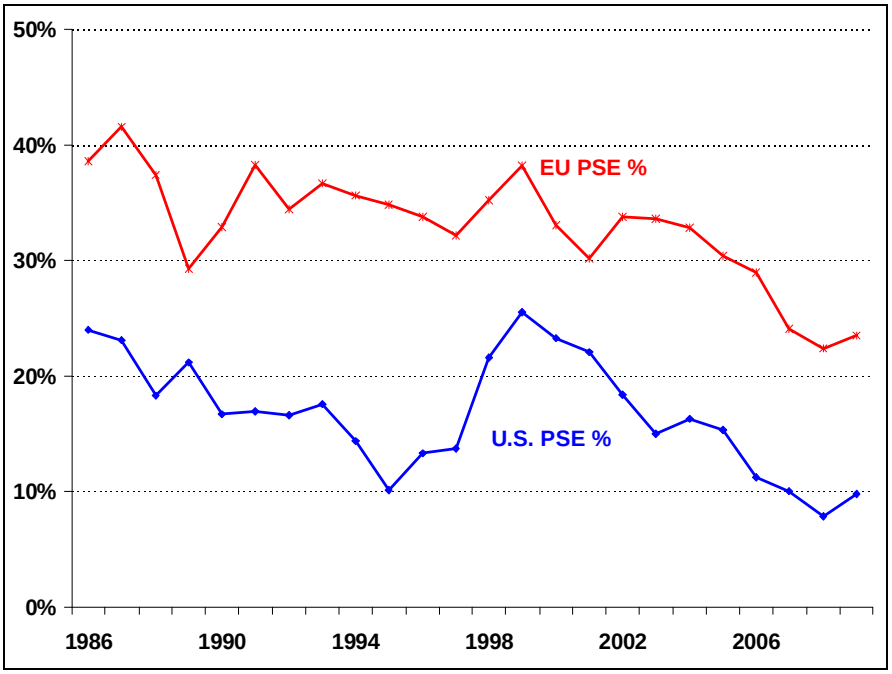
data. The OECD report also provides information across several levels of EU enlargement (**Table 3**).[44]

With respect to U.S. and EU agricultural support, the 2010 OECD report highlights the following general conclusions, among others:

- after reaching its lowest level since the 1980s in 2008, the producer farm support (PSE) index edged up slightly in 2009, due almost entirely to a reduction in the value of agricultural production following a fall-off from the high commodity prices of 2008 (**Figure 1**);
- since the mid-1980s there has been a continued shift away from most market-distorting supports (i.e., within the PSE index, outlays are moving away from market price support and payments based on output or input use, and towards payments based on fixed historical criteria or non-commodity criteria); and
- there is a continued shift toward new policy measures to strengthen the viability of rural areas and improve environmental performance, among other societal concerns (i.e., GSSE is growing relative to PSE).

Since the United States and the EU play such large roles within the OECD group of developed countries, these same conclusions apply to the larger OECD membership; however, reforms in the area of farm policy have been uneven across OECD countries.

Figure 1. U.S. and EU PSE % of Gross Farm Output, 1986-2009



Source: OECD Producer and Consumer Estimates database; http://www.oecd.org/agriculture/pse. These data are based on the tables and discussion in *Agricultural Policies in OECD Countries: At a Glance 2010.*

[44] The EU is currently composed of 27 independent sovereign countries. Three candidate countries are being reviewed for accession: Croatia, the Former Yugoslav Republic of Macedonia, and Turkey.

PSE Percentage Declining for Both United States and EU

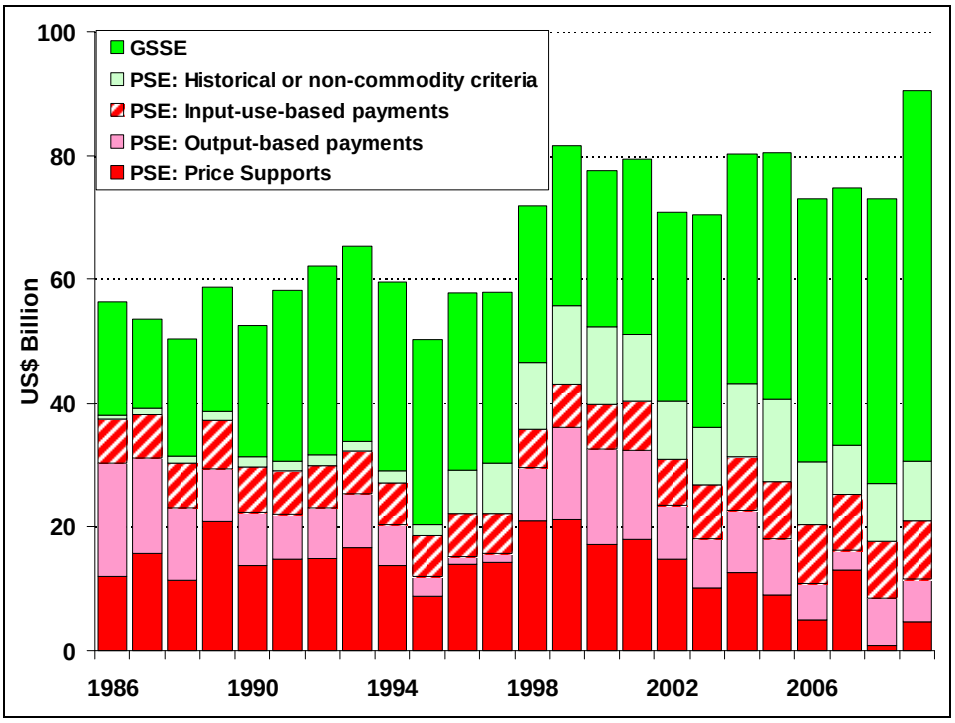
The PSE percentage index expresses the PSE value as a percent of the total gross agricultural output, thus avoiding the influence of exchange rate fluctuations and allowing for direct comparisons (**Figure 1**). Total producer support in the United States has declined from an estimated 22% of gross farm receipts during the 1986-1988 period to about 10% of receipts in 2009. Comparable estimates for the EU show that total production support (PSE) also has declined from an estimated 39% of gross farm receipts during the 1986-1988 period to about 24% in 2009. Thus, although producer support has declined as a share of gross farm output for both the United States and the EU, the EU still supports agriculture at more than double the rate of the United States.

Figure 2 and **Figure 3** compare available PSE and GSSE value estimates (in domestic currencies) for the United States and the EU by support category since the mid-1980s. **Figure 4** presents the PSE estimates for the EU in U.S. dollars. To facilitate comparisons of how support levels have changed across types of programs, the PSE and GSSE data have been disaggregated into five categories—three categories that are market distorting (market price support, support payments based on current output, and support payments based on current input use), and two categories that are decoupled or less-market distorting (support payments based on some criteria other than current production activity (i.e., either historical production or a non-commodity criteria) and GSSE outlays. The three market-distorting categories (shaded dark, light, or striped red) tend to encourage producers to produce more than the market wants, particularly during periods when market prices are low. The two less-distorting categories (shaded dark or light green) provide support decoupled from output; thus, they are viewed as providing support to the agricultural sector without encouraging over-production.

Looking first at total agricultural support for the United States (**Figure 2**), the share derived from market price support programs has dropped from 25% during the 1986-1988 period to 5% by 2009, and the combined share for the three market distorting categories has dropped from 66% to 23% of total support. Meanwhile, decoupled support payments have increased from under a 34% share of total support in the 1986-1988 period to a 77% share in 2009.

Total U.S. agricultural support (as measured by the OECD's PSE and GSSE data) has expanded from under $60 billion in 1986 to over $90 billion in 2009, driven primarily by growth in GSSE support. The surge in U.S. GSSE payments in 2009 (**Figure 2**) was caused by a sharp increase in use of the Supplementary Nutrition Assistance Program (SNAP; formerly known as the Food Stamp Program) related to the economic recession and ARRA as discussed earlier. SNAP outlays jumped from $33.4 billion in 2008 to a record $44.5 billion in 2009.

Figure 2. U.S. Level and Composition of Agricultural Support, 1986-2009



Source: OECD Producer and Consumer Estimates database; http://www.oecd.org/agriculture/pse. These data are based on the tables and discussion in , *Agricultural Policies in OECD Countries: At a Glance 2011*.

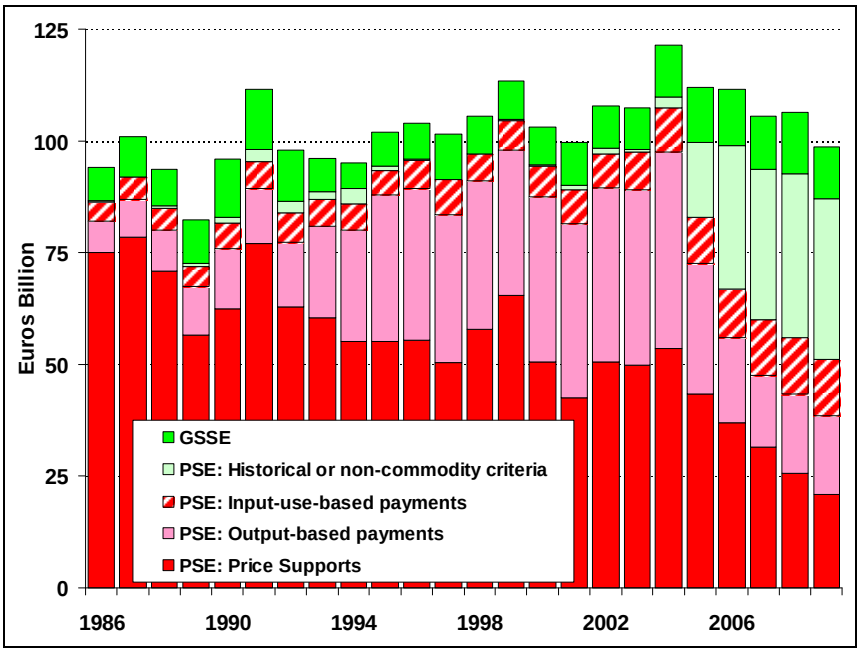
Comparable estimates for the EU (**Figure 3**) show that total agricultural support (as measured by the OECD's PSE and GSSE data) has fluctuated around €100 billion during the 1986 to 2009 period, but since 2004 has shown a clear downward trend and a strong shift away from coupled market-distorting support towards decoupled support.

Market price support and coupled payments have traditionally played a much larger role in EU agricultural policy, both as a share of total agricultural support and in their absolute level. EU market price supports have declined from a highpoint of €78.5 ($92.5)billion in 1987 accounting for a 78% share of total agricultural support, to just under €21 ($29) billion and a 21% share in 2009. Total coupled payments reached a highpoint in 2004 at €107 ($133) billion (88% share of total support) and have declined to €51 ($71) billion and a 52% share in 2009.

Meanwhile, decoupled support payments (shaded dark or light green) have increased from €8 ($8) billion and an 8% share of total support in 1986 to nearly €48 ($66) billion and a 48% share in 2009. The single largest component of the EU's decoupled payments is the SFP which shows up as the light green shaded area (and referred to by OECD as PSE support that is based on historical or non-commodity criteria—i.e., decoupled PSE).

When EU PSE and GSSE data are expressed in dollars, exchange rate fluctuations suggest the appearance of increasing support rates (**Figure 4**). Whether expressed in dollars or euros, both charts clearly show the drop-off in coupled, market-distorting support that has occurred in the EU since 2004 due to the various reform programs enacted prior to that date.

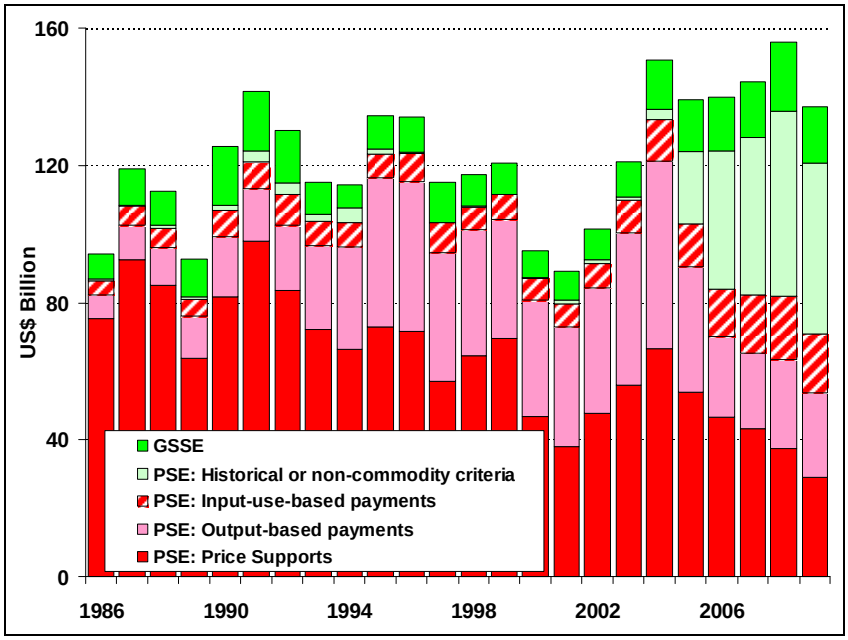
Figure 3. EU Level and Composition of Agricultural Support, 1986-2009



Source: OECD Producer and Consumer Estimates database; http://www.oecd.org/agriculture/pse. These data are based on the tables and discussion in , *Agricultural Policies in OECD Countries: At a Glance 2011*.

Notes: EU12 for 1986-1994; EU15 for 1995-2003; EU25 for 2004-2006; and EU27 from 2007. The red shaded areas (dark red, light red, and red striped) include payments linked directly to production, input use, or market prices. The green (both light and dark) shaded areas are decoupled supports including payments based on historical or non-commodity criteria and General Services Support Estimates (GSSE).

Figure 4. EU Agricultural Support in Billion U.S. Dollars, 1986-2009



Source: EU euro data are converted to U.S. dollars using the ERS, USDA, agricultural exchange rate data set, at http://www.ers.usda.gov/data/exchangerates/.

Conclusions and Policy Implications

The EU is one of the United States' chief agricultural trading partners and also a major competitor in world food markets. Both the EU and the United States heavily support their agricultural sectors. However, strong budgetary pressures coupled with a shifting policy preference towards greater market orientation have motivated both the United States and the EU to modify their farm programs since the 1980s. Traditional price and income support programs have been progressively replaced by support that is decoupled from production or prices.

Many commodity groups and Members of Congress representing agricultural districts, have historically defended U.S. farm support programs as a means to ensure that the United States has continued access to the "most abundant, safest, and cheapest food supplies in the world." Yet some argue that the failure of the United States and EU to enact deeper, more rapid reforms of their respective farm support programs has contributed to delays in the Doha Round of multilateral trade negotiations within the World Trade Organization (WTO). Information comparing the EU and U.S. farm support programs will continue to be of interest to Congress as the Doha negotiations continue to move forward.

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