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POLICY DEPARTMENT
STRUCTURAL AND COHESION POLICIES **B**

Agriculture and Rural Development

Culture and Education

Fisheries

Regional Development

Transport and Tourism

**LATEST U.S. FARM BILL
DEVELOPMENTS**

NOTE



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AGRICULTURE AND RURAL DEVELOPMENT

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NOTE

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AUTHOR

AgroParisTech, Mr. Jean-Christophe BUREAU

RESPONSIBLE ADMINISTRATOR

Mr Albert MASSOT
Policy Department Structural and Cohesion Policies
European Parliament
B-1047 Brussels
E-mail: poldep-cohesion@europarl.europa.eu

EDITORIAL ASSISTANCE

Ms Catherine MORVAN

LINGUISTIC VERSIONS

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ABOUT THE EDITOR

To contact the Policy Department or to subscribe to its monthly newsletter please write to:
poldep-cohesion@europarl.europa.eu

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Abstract:

The US Senate and the House Agricultural Committee have adopted their versions of the next Farm Bill but there is no agreement on a common text. Both proposals reinforce the protection of farmers against adverse conditions. They may result in very large payments for taxpayers in particular years and could lead to WTO challenges. The US decision process is heavily influenced by vested interests, which explains the persistence of costly policies such as the inefficient insurance subsidies. Congress proposals for the next Farm Bill may further distort international markets.

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LIST OF ABBREVIATIONS

ACRE	Average Crop Revenue Election
AMS	Aggregate Measurement of Support
BCA	Budget Control Act
CAP	Common Agricultural Policy (EU)
CBO	Congressional Budget Office
CCC	Commodity Credit Corporation
CCP	Countercyclical Payments
CRP	Conservation Reserve Program
CSE	Consumer Support Estimate
CSFP	Commodity Supplemental Food Program
CSP	Conservation Stewardship Program
DEIP	Dairy Export Incentive Program
ERS	Economic Research Service (USDA)
EU	European Union
EQIP	Environmental Quality Incentives Program
FARRM	Federal Agriculture Reform and Risk Management Act (proposal)
FAIR	Federal Agriculture Improvement and Reform (Act)
FCEA	Food, Conservation and Energy Act
FCIC	Federal Crop Insurance Corporation
FDPIR	Food Distribution Program on Indian Reservations
LDP	Loan Deficiency Payment
MFF	Multiannual Financial Framework (EU)
MFN	Most Favoured Nation
MILC	Milk Income Loss Contracts
NAP	Noninsured Crop Disaster Assistance Program
NGO	Non Governmental Organisation
NSLP	National School Lunch Program
OECD	Organisation for Economic Co-operation and Development
OTDS	Overall Trade Distorting Support
PIK	Payment In Kind (certificates)
PPP	Purchasing Power Parity
PSE	Producer Support Estimate (formerly Producer Subsidy Equivalent)
R&D	Research and Development
SCM	Subsidies and Countervailing Measures
SFP	Single Farm Payment (EU)
SNAP	Supplemental Nutrition Assistance Program (formerly food stamps)
TEFAP	Emergency Food Assistance Program
TRQ	Tariff Rate Quota
TSE	Total Support Estimate
URAA	Uruguay Round Agreement on Agriculture
US	United States (of America)
USDA	United States Department of Agriculture
WIC	Supplemental Nutrition Program for Women, Infants and Children
WTO	World Trade Organization

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EXECUTIVE SUMMARY

The US Farm Bill

The US agricultural legislation is defined in successive "Farm Bills". The mandatory funding of many provisions of the current 2008 Farm Bill expired at the end of September 2012. In the absence of a new Farm Bill, some key programs (in particular the large food stamps program) would continue in 2013 but many other provisions would expire, or their funding would not be available. If no agreement is found within Congress, without a Farm Bill, a core of (outdated) "permanent law" could in principle be activated, but this would prove unpractical. For the post 2012 period, the most likely option is that the current Farm Bill is temporarily extended until a new Farm Bill is passed. Even this may raise some difficult funding problems due to the automatic budget stabilizers that Congress has adopted.

The US institutional process is different from the one in the EU. The US administration has very limited power in the setting of agricultural legislation, which is mostly defined by the Congress (Senate and House of Representatives). As an example, the 2008 Farm Bill was passed by Congress in spite of the opposition and veto of the President. There is no equivalent in the role played by the EU Commission. Overall, the influence of local organizations and interest groups on the Representatives seems more pronounced than in the EU Parliament due to the institutional settings.

Over time, Farm Bills have adapted to new challenges. In the 1980s and 1990s, Farm Bills were designed to put US agriculture in a better position to export, by removing supply controls and lowering guaranteed prices. After a period when support shifted to decoupled direct payments, the US policy has experienced a turnaround. Since the early 2000s, US farm support has reverted to instruments that are more linked to market conditions and yields. The 2008 Farm Bill as well as the proposals tabled by Congress for the 2012 Farm Bill go further to protect farmers from adverse situations. This contrasts with the EU policy which, at the same time, has been more consistent, pursuing reforms so that support relies increasingly on decoupled, "production neutral", payments.

The procedure for setting the US Farm Bill should not be a source of inspiration for the EU. The recent US Farm Bills have resulted in multiple layers of subsidies that benefit vested interests. They proved necessarily to secure approval from different interest groups and geographical areas. The institutional process generates overlapping and, in some cases, cost inefficient policies.

The current US farm policy

In the current policy, implemented with the 2008 Farm Bill, nutrition programs represent close to 80 percent of the total Farm Bill budget. As far as farm support is concerned, there are many layers of payments. Some are related to price support (marketing loan programs), others are fixed ("direct payments") or indexed on prices ("countercyclical payments"), or provide compensation for income loss ("ACRE", "SURE"), or correspond to crop or revenue insurance.

US Conservation programs are ambitious and evaluations show that they are effective. They are nevertheless particularly targeted by budget cuts (together with the large

nutrition programs). The fact that they rely more on land retirement than the EU programs make them politically vulnerable in periods of high commodity prices.

The combined countercyclical, insurance, disaster and revenue stabilization policies provide considerable protection of farmers against lower yields and prices. In some particular years they generate very large budgetary outlays. The insurance programs seem particularly cost inefficient. The system is such that the taxpayer bears most of the costs while rents are distributed to intermediaries. The deadweight losses are such that some economists estimate that granting public insurance for free would save money.

The US subsidies remain within the WTO commitments under the Uruguay Round Agricultural Agreement, but the *de minimis* clause is largely used. The cotton case brought by Brazil suggests that some US payments could be challenged in the WTO.

The proposals for a new Farm Bill

The US Senate adopted its own version of a Farm Bill in June 2012. The Agricultural Committee of the House did the same for its version in July 2012. But the House remains divided and has not yet adopted its version of the Bill as we write (September 2012). Finding an Agreement within the House and between the two chambers may prove difficult. The proposals tabled target the nutrition program (food stamps) and the conservation programs for large budget cuts. They will end the fixed (decoupled) direct payments, but are likely to expand the insurance program and the "shallow loss" payments that protect farmers from drops in income.

The combination of the insurance and income protection payments in the proposals tabled does not seem to significantly reduce the costs of the farm programs. The assumptions that are used in assessing the costs of these programs tend to overlook the amount of payments that could take place in particular years.

While Congress claims that its proposals will end "direct payments", it is only the fixed, decoupled, direct payments that will be eliminated, not the many layers of direct payments that depend on market conditions. Overall the system might be more distorting for world markets, given the prospect of higher insurance and shallow loss payments. With the 2012 drought, the US is likely to be close to its maximum Aggregate Measurement of Support (AMS) in the World Trade Organization (WTO). The proposed reforms by the Senate and the House Committee are likely to result in higher AMS, at least for years of low income. They may bring the US close to its AMS ceiling. More generally, the provisions proposed by Congress are unlikely to solve the ongoing WTO disputes.

There are very few areas of convergence between the CAP reform proposal and the US Farm Bill proposals. Concerns about volatility of prices and incomes are shared by both proposals, but the EU responds to them with much more limited instruments than the US arsenal of measures. In almost every other area, the CAP reform proposal and the Farm Bill diverge. While the EU tends to reduce distortions on the world market, the US program appears to prioritize protecting US farmers from any possible adverse event, and increasingly distant from the spirit of multilateral cooperation.

Because the US policy protects farmers but maintains an environment favourable to their competitiveness, the risk is that, by playing the card of multilateral discipline and non distorting support, the EU might face increased competition from both emerging countries, which increasingly support their farmers, and aggressive US exports.

1. THE US FARM BILLS: CONTEXT AND DESIGN

KEY FINDINGS

- The US agricultural legislation is defined in successive "Farm Bills". The mandatory funding of many provisions of the current 2008 Farm Bill expired at the end of September 2012. In the absence of a new Farm Bill, a core of (rather outdated) "permanent law" could in principle be activated, but this would prove impractical. For the post 2012 period, the most likely options are that a new Farm Bill is passed or that the current one is temporarily extended.
- The US institutional process is different from that in the EU. The US administration has very limited power in setting agricultural legislation, which is mostly defined by the Congress (Senate and House of Representatives).
- Over time, Farm Bills have adapted to new challenges. In the 1980s and 1990s, farm bills were designed to put US agriculture in a better position to export, by removing supply control and lowering guaranteed prices. After a period when support shifted to decoupled direct payments, the US policy has experienced a turnaround. Since the early 2000s, US farm support has reverted to instruments that are more linked to market conditions and yields.
- If there is no Agreement on the reduction of deficit, the US budget is bound by automatic stabilizers that may lead to drastic cuts in the farm budget and make even a simple extension of the current FCEA problematic.
- The 2008 Farm Bill as well as the proposals tabled by Congress for the 2012 Farm Bill go further to protect farmers from adverse situations, while the EU sticks largely to decoupled, production neutral, payments.
- The recent US Farm Bills have resulted in multiple layers of subsidies that please vested interests. They have served to "buy" approval from different lobbies and geographical areas. The institutional process generates rather inefficient and overlapping policies. The procedure for setting the US Farm Bill should not be a source of inspiration for the EU.

1.1. An overview of the successive Farm Bills implemented

In the United States (US), most of the legislation related to the federal agricultural and food budgets and policy instruments is defined for a limited period of time. It must periodically be renewed or redesigned. Many provisions and/or funding of the current farm legislation, the Food, Conservation and Energy Act or FCEA passed in 2008, are supposed to expire on September 30 2012 or in the following months.

1.1.1. What is a US Farm Bill?

In practice, the legal framework for agricultural policy is set through a legislative process that is passed approximately every 5 years by the US Congress¹. A Farm Bill can also reauthorize, amend, or repeal provisions of preceding temporary agricultural acts and put forth new policy provisions for a limited period of time into the future. It can amend some

¹ The Congressional Research Service's glossary suggests that the use of the term "Farm Bill" should be used for the agricultural bills passed since the 1965 Food and Agricultural Federal Act. Note that the term "Farm Bill" is normally used only during the lawmaking process, and once enacted the final version of the Bill becomes an "Act", but the term is often used in a general way. We adopt this general appellation in this note.

provisions of the "permanent law" that constitutes core legislation. This permanent law is generally suspended by the Farm Bill. It is noteworthy that some US agricultural legislation, and in particular some considerable budget appropriations can be voted on outside of farm bills.

A Farm Bill typically includes a series of "Titles", dealing with commodity programs, trade, rural development, farm credit, conservation, agricultural research, food and nutrition programs, marketing, etc. As this text is written (September 2012), the US Senate passed its own (draft) version of the Bill (June 21 2012) and the House Agriculture Committee released its draft version, of its own Farm Bill, the Federal Agriculture Reform and Risk Management Act (FARRM, July 9 2012)

Farm Bills deal not only with agriculture but also with all other affairs under the purview of the US Department of Agriculture (USDA), and in particular food and nutrition policy. The Farm Bill may also include some pieces of legislation that go beyond the strict area of agriculture (e.g. environmental policy, energy policy).

1.1.2. A historical perspective

The persistence of "old" legislation. US Farm Bills have a long history. The current FCEA still includes some of the farm programs that were introduced in the Great Depression era, and it has been shown that the external trade policy of the US (tariffs and quotas) still bear the traces of the early 1900s policies (Bowers et al, 2004; Skully, 1993). The version of the 2012 Farm Bill passed by the Senate in June 2012 leaves in place some programs that can be linked directly to the 1930s policy (e.g. support for sugar growers and some instruments in the arable crops and cotton policy).

The persistence of such programs over time has been explained by political economy considerations. In the 1930s, New Deal programmes were enacted both for agriculture and industry, but while industrial measures were rapidly dismantled, the farm legislation helped lobbying power to develop in Congress, and the 1930s measures for agriculture were converted into a permanent farm subsidy mechanism (Orden et al, 1999). New instruments were then developed to cope with the periodic decline in prices after World War II (WWII). The benefits of these programs have mostly been captured by owners of the fixed resources in agriculture, creating some vested interests, and making it difficult to remove them (Johnson, 1991).

The origin of the current programmes. Some of the major components of US farm policy can be traced back to the time of US Independence. This is the case of the orientation of the policies towards exports (the English-imposed export taxes were banned in the Constitution right after independence in 1776, see Findlay and O'Rourke, 2007). This is also true in the case of the laws on land property. Other instruments and institutions still in place date back to President Lincoln, who signed laws establishing the Department of Agriculture, granting land to the States for agricultural colleges. The structure of the financing of US public R&D (shared between the state and federal levels) is still a direct consequence of the 1887 Hatch Act, a specific legislation on research and experimentation in agriculture. Many stations founded at the time became state cooperative extension services and are still part of the system of land grant universities (Rasmussen, 1983). The purpose of the Federal Farm Loan Act of 1916 was to increase credit to rural family farmers. It led to the establishment of the modern federal administration in charge of agriculture, as well as regional banks and farm associations.

The current farm programs originate from the periods when US agriculture experienced major depressions. After the US civil war, the record deflation that hit the US economy did not spare agriculture. Prices collapsed and farmers experienced hard times until the late 1890s. Public policies tried to reduce overproduction and raise prices by breaking up monopsonies and transportation monopolies (e.g. the 1890 Sherman Antitrust Act which was passed in particular under farm interest pressure). Some guaranteed prices were first implemented in the 1910s.

It was during the Great Depression that most of today's policy instruments were initiated. During the general deflation, farm prices fell most of all. Farm incomes collapsed and land prices were divided by more than two in the span of ten years. The 1930s was particularly bad for the tenant farming system which characterized the cotton and tobacco industry in the South. Landowners got rid of tenant farmers and replaced them with wage labourers, with disastrous social consequences. The Roosevelt presidency enacted the Agricultural Adjustment Act, the agricultural complement of the National Industrial Recovery Act that often characterizes the New Deal. While the measures taken in the Industrial Act were discarded within a few years, those of the Agricultural Act lasted. This is particularly the case of the "commodity loan" program designed in 1933, a system of "loaning" money to farmers who put crops in storage (Rasmussen, 1983). This operation was entrusted to a government agency, the Commodity Credit Corporation (CCC) which would become a major US farm policy institution for the rest of the 20th century. The measures to deal with the Great Depression during the New Deal era restricted agricultural production by subsidizing land set-asides with the aim to raise farm prices, and included demand enhancement, through large scale relief programs to the unemployed, paving the way for future food stamps programs.

Interestingly, the US attitude towards government intervention remained very peculiar in the agricultural sector, and government intervention in this sector persisted even under the most budget cutting administrations. It has been argued that one of the reasons is that, at the end of the Great Depression, policymakers concluded that government intervention helps agriculture and hurts industry (Goldstein, 1989). This may explain that, unlike the industrial sector, US agricultural trade relied on import restrictions, export subsidies and import duties after World War II, with some of these policies being still in place today.

In the 1948 Act, the concept of parity of income between the farm population and other sectors was rather central and contributed to setting mandatory prices for a number of commodities. The price support system of the 1938 Act was extended so as to include wheat, corn, cotton, rice and tobacco, i.e. the main crops that are still supported today. It is noteworthy though, that in spite of this "parity" concept, the 1950s and 1960s saw the exclusion of the traditionally numerous small and poor black farmers. By 1990s, the number of minority farmers in the US had fallen to less than 20 000, i.e. they had virtually disappeared, questioning the efficiency of the commodity price support in reducing farm poverty (Gardner, 1987; Orden et al, 1999).

Other current programs find their roots in the post WWII period. The 1949 US Federal law introduced a framework stating that the federal government provides assistance to the States in the establishment, maintenance, operation and expansion of school lunch programmes, and that surplus food could be donated to overseas countries as development aid. This legal framework is still used today to support US food aid and its donation to charity organizations or the World Food Program. Under the 1954 Agricultural Act, price support provisions for basic commodities were managed by the CCC. The subsidies for long term removal of land from production for conservation purposes date back to the 1956

Agricultural Act (the current Conservation Reserve Program enacted in 1985 is a revised version of the 1956 provisions).

The successive Farm Bills. If we follow the strict definition of the term "Farm Bill" by the US Congressional Research Service, ten of these Bills have been passed so far. The 1965 *Agricultural and Food Act* designed the system of support for milk (federal milk marketing order) that has been revised in subsequent farm bills until now. The 1965 Act also included some land diversion programs and set targets for both farm income enhancement and price stability (Rasmussen, 1983). The second Farm Bill, the 1970 *Agricultural Act* replaced some of the supply management with voluntary annual cropland set-asides and marketing certificate payments. This paved the way for the modern methods of managing target prices. Individual ceilings were also set for payments.

The price spike for crops that took place in 1973-1974 (which, when put in historical perspective, is more dramatic than the spike in 2008) greatly influenced the 1973 *Agriculture and Consumer Protection Act*. The 1973 Farm Bill emphasized production to respond to "ever growing worldwide demand for food and fibre" (Rasmussen 1983). Farmers were assured target prices and loan rates (a form of minimum price for producers) were set below market prices to encourage products to move into markets rather than into public storage. One objective was to reduce forfeitures of surplus stocks to the CCC. Deficiency payments were made to farmers when the target price was higher than either the loan rate or the market price. The 1973 Farm Bill also authorized disaster payments, created the Rural Environmental Conservation Program and amended the Food Stamp program which had been implemented in 1964 with provisions for low income mothers and children.

The 1977 *Farm Bill* established a farmer-owned reserve for grain, a new two-tiered pricing program for peanuts, reformed the eligibility requirements to the Food Stamp program and introduced a title for research, education and extension that made the USDA the leading federal agency in these areas. While the 1977 and 1978 Farm Bills pushed up nominal target prices and loan rates, President Reagan intended to reduce farm programs spending after 1980. The Reagan administration proposed an outright elimination of income support through target prices and deficiency payments and implementing discretionary authority to lower price loan rates. This was not accepted by Congress.

The rise in real interest rates at a time when farmers had borrowed a great deal triggered a financial crisis in the sector. The 1981 *Agriculture and Food Act* responded with more price support for farmers and export subsidies, which were presented as a response to the EU export refunds. Substantial surpluses accumulated in the early 1980s, and the USDA implemented the Payment-In-Kind or PIK program, offering surplus agricultural commodities owned by the government in exchange for agreements to reduce production by cutting crop acreage. The program achieved its objectives of reducing production and eliminating much of the government-owned surplus (wheat was an exception). In spite of its claims of fiscal conservatism, the Reagan administration extensively used the PIK program, generating considerable farm expenditures.

The "decoupling period". In the early 1980s, supply controls to cope with surplus and low prices reached historic levels (in 1983 the 78 million acres of land set aside corresponded to more than 30 percent of national planted acreage). Such an ambitious program helped foreign countries (including the EU) to develop production at the expense of US exports. The US response was to move towards lower loan rates, reduce price

supports and enhance US product competitiveness. Farmers were compensated with direct payments.

The 1985 Farm Bill started the move from price support to direct subsidies. It took several steps towards decoupling cash payments from planting decisions, in particular by freezing the program acreage bases and the yield per hectare that became eligible for deficiency payments. On the political side, this was a period when the farm lobby searched alliances in order to circumvent the initial plans by the Reagan administration to cut farm subsidies. It turned some potential enemies into powerful allies in Congress by supporting conservation and nutrition programs. The cuts in the agricultural budget envisaged by the Reagan administration were eventually opposed by Congress.

The *Food, Agriculture, Conservation, and Trade Act* of 1990 took place in the middle of the Uruguay Round of trade negotiations. However, the influence of the Round on the Farm Bill process was to prevent any significant reform, rather than adapting the legislation to the negotiations (Orden et al, 1999). Payments were further decoupled from production decisions by fixing the acreage base for each crop at historic levels, making the payments almost fully decoupled (farmers were still required to idle land in return for receiving payments if USDA believed that supplies would exceed demand in any given year).

The 1996 *Federal Agriculture Improvement and Reform Act* (FAIR) was the product of negotiation between the Clinton administration, which initially wanted to cut farm subsidies heavily, and a Republican Congress, itself divided (Orden et al, 1999). The compromise took the form of the "Freedom to Farm" Bill, which removed restrictions for planting and proposed a large decoupling of payments, even if the instruments for price management such as the loan rates were eventually maintained. By seeking to decouple direct payments from market conditions, the 1996 FAIR echoed the 1992 CAP reform in the EU. It went even further by ending deficiency payments and eliminating acreage bases and annual supply controls (the equivalent policies were maintained in the EU until 2008). To compensate farmers for giving up deficiency payments, Congress created "Production Flexibility Contract" payments, which were to be phased down to zero over the seven year life of the Bill.

With the 1985, 1990 and 1996 Farm Bills, the US took the clear direction of being a low-cost supplier of grains to world markets, by abandoning supply controls and choosing a low loan rate. With less competitive policies, the EU would later be forced to implement further reforms, while the US was gaining its market shares back.

The 2002 turnaround. After the 1985 and 1996 Farm Bills, the US was a key actor in promoting the reforms agreed upon within the OECD Ministerial Mandate and then underlined the 1994 WTO Agreement. It championed the removal of the largest distortions in world markets, by shifting from supply control, price management and export subsidies toward more neutral direct payments. However, measures taken in the very late 1990s and the 2002 Farm Bill reversed this course (Petit, 2002; Thompson, 2005).

Domestic politics explain a lot of the 2002 turnaround. There were troubled times with the threat of impeachment of President Clinton, which was dependent on a very slim majority (Democrats controlled the Senate thanks to a one-vote majority). Concessions to interest groups from both parties led Congress to vote through some exceptional subsidies beyond those scheduled in the FAIR Act at the end of the 1990s. This, together with persistently

low commodity prices, a federal budget surplus and an electoral campaign led Congress to design an expensive Farm Bill.²

The 2002 Farm Bill reversed many of the 1996 Farm Bill's achievements. It continued the FAIR like fixed payments decoupled from current production and prices, extending them to oilseeds (including soybeans) and peanuts. However, the base areas could be updated, creating an incentive to develop production in the future. Payment rates and loan rates went up for most commodities and a target price system that had been largely abandoned with the FAIR Act was partly restored. The new legislation also extended the milk price support programme (administered through government purchases and import restrictions) and added a new National Dairy Market Loss Assistance Programme.

A major impact of the 2002 Farm Bill is that it further expanded the multi-layer system of payments. Indeed it also created a new counter-cyclical payment (CCP) that institutionalized \$2 billion of the *ad hoc* payments that had been made each of the previous years. What was envisioned as transitional compensation (the production flexibility contracts and the emergency payments) that would be phased down over time therefore became somewhat permanent. The 2002 Farm Bill also created or resurrected new farm programs for commodities such as small legumes, wool and honey, and increased benefits to sugar and dairy producers (Wetscott, 2002; Thompson, 2005). The Bill maintained export subsidy programmes, and expanded conservation programmes significantly. It bought out the quotas in the old peanut support program, which were particularly inefficient (but replaced them with a new support program).

The 2002 Farm Bill therefore modified drastically the orientation of US agricultural policy. Even if the US policy kept formally respecting WTO commitments – an issue that a recent WTO panel on cotton tends to challenge - it departed from the spirit of reforms agreed upon internationally. It also sent the signal that the US Farm Bill system was unable to lock-in reforms and that political-special interest groups gained the support of political leaders and thereby could change the original rules (Ayer and Swinbank, 2002). However, one may also argue with Petit (2002), that the 2002 experience shows that full decoupling is politically unsustainable in a world of unstable commodity markets. The fact that the ongoing discussions on the 2012 Farm Bill focus so much on ensuring that producers will not suffer from adverse conditions suggests that Petit's interpretation is implicitly the US Congress one.

The 2008 Farm Bill³ The 2008 Farm Bill, enacted in the *Food Conservation and Energy Act* of 2008 (FCEA) confirmed the shift away from production neutral support and towards a multi-layer system of instruments that protect farmers against adverse conditions, regarding not only prices but also quantities harvested.

The 2008 Farm Bill continued most existing farm and commodity programs and created new programs and provisions in particular in the area of insurance and disaster payments. Price support was revised for some commodities (more often upwards except for a few commodities such as cotton); milk quantities eligible for payments were increased and an ethanol based program supported sugar producers. The Bill also created a new voluntary program called Average Crop Revenue Election (ACRE) in addition to the existing layers of

² It is noteworthy that by the end of 2001, the US federal budget surpluses were coming to an end so rapidly that Congress passed the 2002 Farm Bill a year early while it could still pretend that the corresponding budget would be there.

³ The 2008 Food, Conservation, and Energy Act was analysed in detail in a European Parliament Report (EP, 2008).

direct, counter-cyclical, and marketing loan programs. Other provisions included changes to the current crop insurance program and a new provision for ongoing disaster assistance (SURE or Supplemental Revenue Assistance Program).

Contrasting with the consistent move towards more decoupled, fixed payments in the EU since the 1992 reform, the 2008 Farm Bill departed from the idea of decoupling, with more measures depending on market conditions, i.e. the CCPs, the ACRE revenue support and the SURE program that complement the crop and income insurance programs.

Lessons. This review of the historical developments in US agricultural policy shows that the Farm Bills have adapted to circumstances. The low prices experienced in the 1930s led to the development of support programmes. Due to widespread misery, the policies during the Depression also relied on public stocks, which were an instrument of farm assistance as well as an instrument of welfare. When the US lost some market share because of its supply control and high loan rates policy in the late 1970s and 1980s, farm support was modified so as to ensure that it did not hamper the competitiveness of US exports, hence lower price support and more deficiency payments. When price instability threatened farm incomes, generous safety nets were implemented. This led to a variety of payments that now protect farmers from adverse conditions, and in particular a system of crop insurance which is now at the core of US farm policy. However, when looking at the historical developments in US farm policy, it is noteworthy that every measure taken tends to generate rents and vested interests, and that this creates new lobbies for maintaining the measures, hence the current multi-layer farm support program.

1.2. The institutional process

1.2.1. Different types of funding

The Farm Bill is a process largely under the control of the US Congress. To use the EU jargon, the "co-decision" in the US is between the two chambers of the Congress. Congress is nevertheless bound by a set of self imposed budget constraints so as to avoid cost inflation. On the political side, periodic Farm Bills also provide the opportunity to re-examine agricultural and food issues with the US Administration and interest groups.

Federal farm commodity price and income support, conservation, food assistance, agricultural trade, marketing, and rural development policies are governed by a variety of separate laws. Some are "permanent" but are in fact made inoperant because they are suspended by each Farm Bill.

Farm Bills include two aspects, authorization and funding. Congress has the authority to revise and renew practically all laws dealing with farm support, conservation, food assistance, rural development, trade and some energy policies. Congress determines the policy direction for programs included in different "Titles" of the legislation. Congress also has authority over the funding. Federal spending is divided into mandatory and discretionary spending (about 80% of USDA spending is mandatory spending and 20% is discretionary). Congress hence defines the different budgets and creates the budget authority for mandatory spending. Discretionary programs that are authorized in the Farm Bill are paid for separately in annual appropriations bills.

Mandatory spending in the Farm Bill is primarily authorized for the farm commodity programs, crop insurance, nutrition assistance programs, and some conservation and trade

programs.⁴ Mandatory spending can be thought of as multiyear appropriation in the Farm Bill that acts as authorizing legislation, and authorizations do not require an annual appropriation. Mandatory funds are assumed to be available unless they are expressly reduced to smaller amounts by a subsequent act of Congress. Some programs are both authorized and funded in the Farm Bill using multi-year mandatory spending. Other programs are authorized for their scope but are not funded; these require "authorization of appropriations" and rely on discretionary funding in annual appropriations bills.

Discretionary spending (i.e., spending subject to annual appropriations) is authorized for policies other than those mostly funded through mandatory spending. They include some conservation programs, most rural development programs, research and education programs and agricultural credit (some particular research, bioenergy, and rural development programs sometimes receive some mandatory funding, but most of their funding is usually discretionary).

1.2.2. Procedure and time frame

The ongoing procedure. The procedure followed in drafting a Farm Bill is complex. This is particularly the case for the current one. The failure of the "Super Committee" (created in August 2011 to discuss the ceiling of the national debt) to reach a bipartisan position on the reduction of federal spending over the next ten years interfered with the Farm Bill procedure. The design of the Farm Bill was delayed, given the need expressed by Senators to include most of the future agricultural law within the Super Committee's decision package.⁵ The current situation where Republicans are in charge of the House and Democrats the Senate, coupled with strong divergences regarding budget cuts within the Republican party, also makes the Farm Bill discussion part of a more general political battle in a Presidential election year.

The standard procedure is that each of the chambers of the US Congress (see Box 1) defines in its own Agricultural Committee a proposal that is first voted on within the Committee. In both cases, this is what has been done so far. The Senate went further by discussing in plenary session and adopting its version of the Bill on June 21 2012. In the House, the agricultural Committee adopted its version of the Bill on July 12 2012. However, as we write (September 2012) the House leader has not yet tabled the proposal for discussion. Once the House has adopted its own version of the Farm Bill, the standard procedure is that the two chambers convene with their respective versions under a joint conciliation Committee. While this might take several months (as was the case with the 2008 Farm Bill) this should eventually lead to a consensus. The possibility that conciliation fails is nevertheless technically possible, and would trigger the "permanent law" provisions described in the next subsection.

Technically, the new Farm Bill could be adopted before the November 2012 presidential election. It could instead be adopted during the "Lame Duck" session (November 2012-January 2013) when the Congressmen meet after their successors are elected, but before

⁴ Nutrition assistance is the largest category, with 78% of mandatory funding available to write the next farm bill (\$772 billion in the 10-year CBO March 2012 baseline for FY2013-FY2022), but it is noteworthy that the large Supplemental Nutrition Assistance Program (SNAP)—a mandatory entitlement— also requires an annual appropriation. Other primary programs with mandatory funding are crop insurance (9%, or \$90 billion), conservation (6%, or \$65 billion), and farm commodity programs (6%, or \$63 billion). See section 3 and the Congressional Service Report, CRS - R4232 report.

⁵ When the public debt was projected to reach its statutory maximum in 2011, conservative members of the House opposed an increase without drastically reducing government spending. The compromise bill, the Budget Control Act of 2011, was enacted on August 2 2011, which includes across the board cuts to take place in 2013.

the successors' term begins. Another possibility would be to wait for the new administration and the term of a new Congress (31 January 2013). In both cases it would require an extension of the current provisions.

Box 1. The US Congress and the farm legislation

The US Congress relies on a bicameral setup, consisting of the Senate, its upper chamber, and the House of Representatives, its lower chamber. The House was seen as more closely representing the will of the people than the Senate by the designers of the Constitution. The members of the House are elected by and represent limited groups of citizens living in small geographically defined districts within each State. Members of the House are up for election every two years, making them direct advocates of their constituents.

The Senate has 100 members, elected for a six year term in dual-seat constituencies (two from each state), with one-third being renewed every two years. Senators are elected by and represent all voters of their state. Congress was designed so that Senators are less likely to be tempted to vote according to the short-term passions of public opinion than House Representatives.

The current 112th Congress is controlled by a tight majority by Democrats in the Senate (51 Democrats, 47 Republicans, 2 independents) and by a rather large majority of Republicans in the House of Representatives (193 Democrats, 242 Republicans and 1 independent). Senate Majority Leader Harry Reid (Democrat) and House Speaker John Boehner (Republican) have an important role when putting a Farm Bill on the floor. The House Committee on Agriculture chairperson is Frank Lucas (Republican, Oklahoma), and the Ranking Member is Collin Peterson (Democrat, Minnesota). In the Senate, the Committee on Agriculture, Nutrition and Forestry is chaired by Debbie Stabenow (Democrat, Michigan) and the Ranking Member is Pat Roberts (Republican, Kansas).

The deadlines. The current Congress is facing the issue that many of the FCEA provisions expire in 2012, or their funding is not guaranteed without further action by Congress. Without a new Farm Bill or an extension of the current one, the permanent legislation that was enacted decades ago (some in 1938 and 1949) would normally take effect (Box 2). This might happen in the case of a complete gridlock in Congress. This outcome is not considered as desirable since the permanent law does not cover all areas. For many policies the authority to appropriate funds would end and in some cases all program authority could terminate (see Box 2 and Chite, 2012a).

Without a new Farm Bill, many programs would not have statutory authority to receive appropriations.⁶ For the bulk of the commodity programmes, the FCEA covers outlays for the 2012 crop year that will occur in FY2013 given the statutory timing of direct payments, CCPs, and marketing loan support. That is, the effective deadline for enacting a new Farm Bill is when the first commodity is harvested in 2013 (dairy is an exception, with programmes that end on December 31 2012). But many other Farm Bill programs will lose their authorization for appropriations at the end of FY2012, i.e. on September 30 2012 (see

⁶ Appropriations can allow a program to continue even if the underlying authorization has not been extended. For example, most aspects of the food stamps program (except the incentive pilot) and the emergency assistance programmes would continue to operate if funds were appropriated to the SNAP account, but would expire in the absence of a SNAP account appropriation (Monke et al, 2012). Note that the Government Accountability Office (GAO) has concluded that there was no constitutional requirement for an appropriation to have prior authorization, and that a past appropriation could prove a sufficient legal basis to continue the programme (Monke, 2012a2). While the legal technicalities go beyond the scope of this report, the consequence is that some appropriations would be authorized while others would not.

Monke et al, 2012 for details). In addition, because of the (more general) budget cap procedures that have been agreed upon in Congress, and because there was no agreement for a comprehensive legislative package on deficit reduction, automatic cuts in agriculture would go into effect in January 2013 under the process of "budget sequestration" (see section 1.2.3). It is noteworthy (and this plays an important role in the political game), that without a formal extension, the large food stamps program would continue to function beyond September 30 2012 due to the status of the program.

Options in case of the absence of a Farm Bill. Several legislative options are listed by the Congressional Research Service as a farm bill approaches expiration in order to avoid the reactivation of the "permanent law" provisions (Monke et al, 2012; Monke, 2012b). The first one is to adopt a new Farm Bill and reinstate the suspension of permanent law. Another solution is to pass an extension of the current Farm Bill for a limited period of time (also suspending permanent law). Other possibilities would be to suspend the permanent law without a new Farm Bill or to completely repeal the permanent law. This would open the possibility of then passing a new bill or an extension of the current Farm Bill later. Technically it is also possible to repeal the permanent law and do nothing, but this is hardly a likely event. The outdated provisions of the permanent law have resisted repeal for decades, for domestic political reasons (see Box 2).

The most likely options are therefore that Congress passes a Farm Bill, or that Congress decides on an extension of the current Farm Bill for a limited period of time.

As we write this report (September 2012), many fear that it will be difficult for Congress to pass a new Farm Bill before the end of FY2012. Temporary extensions of the 2008 FCEA could prove necessary. Extension happened in the past (the 2008 Farm Bill) but it is not common. Most provisions could be continued with an extension but those that expire before the end of the Farm Bill and those that do not have funding in the baseline budget beyond FY2012 are more difficult to extend. In addition, an extension is not fully compatible with some budgetary decisions enacted separately by the current Congress, and some programs may have to face cuts or could not be authorized. A recent Congressional Research Service report investigates the conflicts between an extension and the general budget stabilization procedures (Monke, 2012a).

Box 2. "Permanent law" and Farm Bills

Past legislation has led to a set of non expiring provisions dating back mostly to the 1938 and 1949 legislation. They remain in statute and are known as "permanent law". It is a rather awkward scenario, since this permanent law has never been repealed but each new Farm Bill suspends permanent law for the duration of the Bill.

In principle, if no action is taken on a new Farm Bill, the permanent law policies, in particular for the farm commodity programs, could resume (Monke et al, 2012). This unlikely event would create a difficult situation. Indeed, permanent law provides mandatory support for basic crops through nonrecourse loans, but without any other market-clearing option than forfeiture of the commodities as a repayment of the loans. Permanent law would not authorize most of the instruments that were introduced in modern Farm Bills, such as countercyclical payments, direct payments, Milk Income Loss Contracts, etc. And it would in principle base the degree of support on the "parity concept", i.e. giving an agricultural commodity the same purchasing power it had in the 1910-1914 time. Some commodities (soybeans and other oilseeds, peanuts, wool, peas, etc.) would lose mandatory support, even though the 1949 Act make them eligible for discretionary authority by the Secretary of Agriculture. Under permanent law, the provisions for milk support could mean that the government would have to purchase very large amounts of milk at a high price.

According to Monke et al (2012), the permanent law has stayed on the books, being only temporarily suspended each time a Farm Bill is passed, as a way to force Congress to take action, since the consequences of going back to permanent law would be seen as unacceptable. It is an option that should be considered only in case of persistent gridlock. An extension of the current Farm Bill is a more likely outcome.

1.2.3. The importance of budget stabilization procedures

The role of the CBO baseline. The debate within Congress relies on the "baseline" of the Congressional Budget Office (CBO). The CBO baseline projects the cost of maintaining the current programs taking into account the status of the programs and their possible expiration (CBO mandatory spending baseline). The CBO also provides estimates of the "scores", i.e. the budget changes, of proposed bills relative to the current programs. That is, the baseline serves as a benchmark or starting point for changes that a bill would make (Box 3).

In the debate on the 2012 Farm Bill, projections must take into account that some automatic budget stabilizers have been adopted (this issue is detailed in section 1.2.3). They impose that for some measures, any extra cost must be funded by cuts elsewhere. When a proposal affects mandatory spending, its impact is measured as a difference from the baseline ("score"). A projected cost increase above the baseline must be offset by cuts elsewhere. By contrast, projected reductions in cost below the baseline provide savings for deficit reduction.

The reliance on the CBO baseline affects political decisions. Indeed, in the current baseline that is used as a reference for all the decisions made in Congress, a variety of countercyclical payments are projected to be zero in the CBO projections because high market prices for commodities are expected to continue. This baseline procedure may lead Congressmen to more intensely target those budgets that appear both certain and large, in

particular nutrition programs, direct payments and conservation measures (see section 3.3.2 for a criticism of the assumptions underlying the baseline).

Box 3. An illustration of the CBO baseline: the March 2012 version

In the CBO projections, a program that receives mandatory funding in the last year of its authorization will be assumed to continue at that level of funding into the future as if there were no change in policy. Major farm bill provisions such as the farm commodity programs or nutrition assistance are assumed to be reauthorized and it is not assumed that funding will cease. However, some programs are assumed to continue in the budget baseline beyond the end of a Farm Bill for several reasons.⁷ They can continue only if their cost is offset. Disaster assistance, most bioenergy programs, and some conservation programs expire without any baseline beyond their expiration date (CBO estimates of the current costs of these programmes are about \$14 billion).

The most recent (March 2012) CBO baseline for mandatory Farm Bill programs is detailed in section **Error! Reference source not found.**, but the main features are the following. The CBO estimates the whole cost of farm programs under mandatory spending at \$995 billion for the 10-year period (FY2013-FY2022). Most of this baseline (\$772 billion, or 78%) is for domestic nutrition assistance programs, primarily the Supplemental Nutrition Assistance Program (SNAP).

The rest, about \$223 billion, is divided among various agriculture-related programs, primarily crop insurance (\$90 billion, or 9%), farm commodity price and income supports (\$63 billion, or 6%), and conservation (\$65 billion, or 7%). The largest three conservation programs have over 93% of total conservation baseline (the Conservation Reserve Program, the Conservation Security Program, and the Environmental Quality Incentives Program). Less than 1% of the baseline is for international trade (\$3 billion) and horticulture programs (\$1 billion). The Energy title has \$0.3 billion of the 10-year baseline for continuing programs, specifically the Feedstock Flexibility program to convert sugar to ethanol (See CBO, 2012 and Monke, 2012a).

Budget stabilizers. The *Balanced Budget and Emergency Deficit Control Act* of 1985 authorizes automatic spending reductions. This led to the procedure of "**sequestration**" which is included as an enforcement mechanism in the *Budget Control Act* of 2011. Sequestration is a process of automatic spending reductions under which budgetary resources are permanently cancelled to enforce budget goals specified in earlier negotiations. Given the failure of the Joint "super" Committee on Deficit Reduction to reach agreement before January 2012 on how to reduce federal spending over the next ten years, up to \$1200 billion in automatic spending cuts under this sequestration process could theoretically occur on January 1 2013, unless Congress and the President agree otherwise. Moreover, sequestration could also affect future Farm Bill baselines, even if a Farm Bill is enacted in 2012 (see Monke, 2010, 2012a).

⁷ In particular because the program did not receive new mandatory budget authority during the last year of a farm bill; or the baseline during the last year of a farm bill is below a minimum scoring threshold; because programs established after 1997 are not automatically assumed to continue and are assessed program by program in consultation with the House and Senate Budget Committees. Or the budget and agriculture committees did not give the program a baseline in the years beyond the farm bill in order to reduce the farm bill's 10-year cost. See Congressional Service Report CRS R42442.

The budget sequestration process would reduce the baseline for Farm Bill programs by an across-the-board cut.⁸ However, major farm bill programs, such as the nutrition programs and some conservation programs (e.g. the Conservation Reserve Program or CRP), are statutorily exempted from sequestration. Other programs, including crop insurance and marketing loan contracts may be exempted, depending on the interpretation of the 2011 *Budget Control Act* and particular statutes by the Office of Management and Budget (OMB). If we add up several estimates by the USDA, sequestration of mandatory Farm Bill programs may total \$18 billion over 10 years, depending on various assumptions about baselines and the outcome of OMB decisions (and the resistance to cut defence budgets as much as other expenditures, which would affect the farm budget).

If sequestration occurs, it could also significantly reduce funding opportunities for discretionary programs in the Farm Bill. The programs that received mandatory funding under the 2008 FECA but with no assured funding for the next Farm Bill (e.g. the agricultural disaster assistance or SURE program, the Wetlands Reserve Program, and the Biomass Crop Assistance Program) would not be renewed either (see Monke, 2012b). If Congress wanted to pursue these programs as well as the ones under discretionary funding, their cost would have to be offset from other programs. This means that even a "simple" extension of the 2008 Farm Bill would be challenging (see Monke et al, 2012).

In addition to sequestration, the **PAYGO system** also caps Farm Bill mandatory spending. Here, the CBO baseline serves as a benchmark or starting point. Unlike sequestration, this provision does not address the deficit increase projected under existing law, but instead deals with the decisions made by Congress that affect the baseline.⁹ PAYGO requires that direct spending and revenue legislation enacted into law do not increase the deficit. When new provisions are introduced that affect mandatory spending, their impact is measured as a difference from the baseline. Increases in cost above the baseline may be subject to budget constraints such as pay-as-you-go (PAYGO) or cut-as-you-go (CUTGO, see the Congressional Service Reports by Stubbs, 2012b and Heniff, 2011 for details). The precise impact of these provisions is difficult to assess, and because of legal ways to circumvent some provisions, the issue is best left to specialist lawyers.¹⁰ In practice, the PAYGO budget rules enacted in 2010 restrict some of the budget-related manoeuvres that were used in past Farm Bills

Obstacles to budget reconciliation. In addition to the current budget stabilizers, other measures for deficit reduction are under debate. Since President Obama created the National Commission on Fiscal Responsibility and Reform to identify changes to balance the budget in February 2010, several proposals have been made for deficit reduction, some of which include farm programs. One reason why the 2012 Farm Bill procedure is particularly complex is that, aside from the influential groups that favour a generous farm policy, there are influential voices in the same party and same Chamber that call for drastic budget cuts (one of these voices is the House Budget Committee Chairman and now vice president

⁸ Note, however that Congress has a year to design how the cuts will be made, so the Agriculture Committees could write a Farm Bill that pre-empts the across-the-board cuts planned in the sequestration process (see Congressional Research Service Report CRS R4232).

⁹ PAYGO (the acronym stands for "Pay as you Go" but the latter expression is confusing since it is also used for other procedures) was introduced in the *Budget Enforcement Act* of 1990, and required all increases in direct spending or revenue decreases to be offset by other spending decreases or revenue increases. After being abandoned during times of budget surpluses, PAYGO was reestablished as a standing rule of the House of Representatives on January 4, 2007, but waived for the *Economic Stimulus Act* of 2008 that intended to fight the economic crisis with Keynesian policies. On February 12, 2010, President Obama signed statutory PAYGO rules into law.

¹⁰ One way way to circumvent some of the constraints might be to include the direct spending increases in an annual appropriation bill (a case can be found in the *Supplemental Appropriations Act* of 2009).

candidate Paul Ryan). For example, the House and Senate Agriculture committees first proposed to the Super Committee cuts of \$23 billion for agriculture spending in November 2011. Since then, other proposals have been made, which would include cuts from the agriculture committee's baseline. These cuts range from \$10 billion (the President's Fiscal Commission proposal) to as much as \$179 billion (House budget resolution).

One issue in the internal debates within Congress is to ensure that proposals for the Farm Bill are consistent with the proposals made on the whole deficit reduction. In its recommendation for reconciliation on the (general) budget, the House Agriculture Committee identified \$35.8 billion of reductions in farm programs (more precisely those programs in the House Agriculture Committee's jurisdiction) over a 10-year period.¹¹ Most of the reductions focused on the nutrition title. Separate from this procedure, but part of the long term House budget Committee plan for reduction of deficits, the House budget resolution recommended \$179 billion of cuts over 10 years to programs in farm programs.¹² The Senate has not passed a budget resolution for FY2013. Rather it is following the budget levels intended for FY2013 under the Budget Control Act of 2011. Without a Senate budget resolution, the budget reconciliation process started in the House might not be considered in the Senate (see Monke et al, 2012 for more details).

In brief, there is still no clear vision of what will happen in terms of overall budget limits. The discipline proposed by the House (the "Cut, Cap and Balance Act" adopted by the House on July 19 2011) was rejected by the Senate and the President and this affects all the discussions on the various programs, including the Farm Bill. The deficit reduction that will affect the Farm Bill is beyond the control of the authorizing committees. How much of the CBO estimated baseline of US\$995 billion over 10 years can be used to write a Farm Bill remains uncertain.

1.3. Differences with the EU agricultural policy design

1.3.1. Institutional differences

A different balance of power. The writing of a US Farm Bill differs a lot from the standard procedure used in designing the EU Common Agricultural Policy (CAP). Until recently in the EU, the decision making process in agriculture was largely in the hands of the Council, i.e. the ministers of agriculture representing governments. By contrast, the US Secretary of Agriculture and the USDA have little role in the definition of a Farm Bill. Under the new EU institutional process, the EU Parliament now has a major role but the Council retains co-decision. In the US, after Congress approves an appropriations bill, it is sent to the President, who may sign it into law, or may veto it. When the US Administration disagrees with the Congress proposal, as has been the case in the Reagan era and as it has been more recently with the 2008 Farm Bill, the Congress' point of view prevails. As an illustration, the US Secretary of Agriculture largely criticized the 2008 Farm Bill proposal and the President vetoed it, but Congress passed it into law with a two thirds majority.¹³ The decision is more largely shared between the executive and legislative powers in the EU.

¹¹ Passed in the House on May 10, 2012.

¹² The Agriculture Committee would decide how to allocate the \$179 billion reduction, but the resolution proposes \$29 billion of cuts over 10 years to agriculture programs such as direct payments, crop insurance, and export assistance; \$134 billion of cuts to nutrition assistance programs; and an unspecified reduction of \$16 billion, likely from conservation programs.

¹³ Note that Congress may, however, combine all or some appropriations bills into a reconciliation bill and the President may request and the Congress may pass supplemental appropriations bills or emergency supplemental appropriations bills.

In the EU, the Commission has the responsibility of drafting proposals. This leads to another balance of power with a technocratic structure that has expertise and information on markets and policies, since it also manages the CAP. In the US, the design of the Bill is left to the Congress, which can rely on the Congressional Research Service for expertise (a service that the European Parliament lacks) and on simulations by the CBO, as well as some expertise from academic centres that Congress contracts with. But even though information from the USDA is used in the process, the administration is largely kept out of the strategic role of designing the policies (the Bush administration submitted its own detailed proposal for the 2008 Farm Bill, but this is not always the case).

Different political cleavages. In the US Congress, partisan politics have played a significant role in delaying the 2012 Farm Bill process. Democrats tend to resist cuts in nutrition and conservation programs that Republicans see as desirable. Cleavages on a given proposal also involve geography. Congress members from the states producing cotton, or fruits and vegetables or dairy often oppose projects from the corn and wheat belt Representatives that tend to provide large subsidies to grains and soybeans. While there are exceptions, in general, Representatives of urban areas tend to support the nutrition budget that provides food stamps; while Representatives from more rural states tend to defend the traditional programs that support producers and shelter them from risk.

In the EU, the geographical dimension is clearly important in the design of the CAP, particularly in the Council. Issues such as "returns" from the EU budget to each Member state play a large role in explaining the positions of each Minister in the Council. This is much less the case in the EP. The political spectrum represented in the EP is also broader than the US bi-party system. Within the EP, policy issues such as the CAP are less prone to turn into a partisan battlefield than in the US Congress. Issues such as the size of the EU budget or the budget for conservation nevertheless affect the vote of each political group along lines that are somewhat comparable to those in the US.

A less consistent policy. The EU farm policy's main provisions are included in the Rome Treaty and subsequently the Treaty on the Functioning of the European Union. Even though the 1957 provisions are somewhat outdated and several texts have de facto led to significant changes in the CAP (see Bureau and Mahé, 2008), this provides a basis that is more stable than the "permanent law" in the US, which mostly serves as a threat for passing a Farm Bill that will suspend permanent provisions. Because of the EU core legislation, and perhaps even more because of the role left to the EU Commission, the EU reforms have followed a consistent path for the last 20 years. The successive reforms in the EU have led to greater market orientation and decoupled payments, as well as a shift towards conservation type policies (EP, 2012). The 1985 and 1996 Farm Bills followed (and even pioneered) a similar move, but this was reversed with the emergency payments in the early 2000s and the link of the CCP and the ACRE and SURE programs to price conditions.

Less strict budget discipline. In the EU, expenditure must be contained in strict predefined budgetary guidelines. There is little scope for lawmakers to adapt the EU budget available for agriculture since actual expenditures must be predictable. In the US, planned budgetary expenditures can be topped with extra budget. In spite of the rules that increases in projected spending have to be offset by other measures, there is the possibility of getting "supplemental funding" for USDA programs, in particular under an emergency designation from Congress and the Administration. That is, the US budgetary procedure makes it possible to design policies involving somewhat unpredictable payments that depend on conditions and harvests. This policy has been used and perhaps even abused by

Congress.¹⁴ In 2008 the Congressional Research Service estimated that some \$48 billion of supplemental funding had been provided within the last 10 years, as well as 36 appropriations, authorization, or farm disaster acts over the past 20 years (Chite, 2008a).

This difference in the budget flexibility is important since it means that in the US, it is easier to develop countercyclical policies than in the EU because of the difficulty for managing unpredictable expenditures as well as carrying over any unspent resource to a future fiscal year. Another difference is that in the US, the farm sector can be quite confident that whatever situation prevails, the US government will always end up supporting the sector, regardless of the legislation in place (Sumner, 2007). In the EU, the idea that in any case the taxpayer will eventually bail them out is also well entrenched in farmers' expectations, but the amounts of money involved are limited by less flexible budgetary rules.

1.3.2. Differences in policy orientations

Different objectives. In the EU, the CAP now focuses on supporting farm income, with the bulk of the budget devoted to direct payments. To a lesser extent, the objective is also to encourage the provision of public goods with a budget for Pillar 2 that has increased over time. By contrast, the US policy focuses on food subsidies to poor consumers, while this has remained a marginal issue in the EU, at least at the Community level.

Since the 2002 Farm Bill, US policies have increasingly sought to reduce the exposure of farmers to adverse conditions (i.e. both prices and yields) while the EU has only largely left such policies as eligible to some potential (and minor) reallocation of funding at the Member states' discretion.

A clear objective of the US Farm Bills is to make US agriculture competitive on the world market and to promote exports. This was achieved by getting rid of supply control, and by adopting a system of support that leaves consumer prices low for most crops. A variety of safety nets and countercyclical programs are also consistent with the US ambition of remaining a major exporter. Such an ambition is less obvious in the EU reforms. There has indeed been some reduction in institutional prices and the proposal tabled by the Commission in 2011 includes a dismantling of sugar quotas after the dairy ones. But the focus has been more on social and environmental issues than in structural policies that would boost EU competitiveness in world markets.

Different conception of conservation. In the EU, the largest share of the conservation budget is devoted to agri-environmental schemes. In addition, the 2003 reform has conditioned direct payments on compliance with existing environmental regulations. In the US, conservation is less oriented to the preservation of the rural landscape or rural heritage. Unlike in the EU, the commodity programs have not been amended to play more of an environmental role.¹⁵ In the US, agriculture is not seen as particularly "multifunctional" and rural development is often seen in opposition, rather than in synergy with protecting the countryside. As a consequence, major conservation programs tend to rely on a "land sparing" concept, i.e. preserving the environment rather than farming it. By contrast, in the EU agriculture is asked to play an active role in the protection of landscape

¹⁴ For example, In May 2007, President Bush signed into law a supplemental \$120 billion bill to fund military operations in Iraq and Afghanistan that included extra payments for agricultural disaster relief (see section 1.3).

¹⁵ There are limited "sodsaver" and "swampbuster" provisions that prevent farmers from buying some insurance programs if they convert valuable habitat and fragile land into cropland, see section 2.5.7.

and the environment. The main environmental programs rely on a "land sharing" approach. The debate between the environmental benefits of land sparing vs. land sharing is not conclusive, even if recent scientific papers suggest that the land sparing approach tends to be more efficient in limiting biodiversity erosion (Phalan et al, 2011; note that the US is moving towards "active land programs", see Effland, 2012).

International commitments. The EU has defined its future policy in a way that attempts to sooth trade relations with third countries, and make it easier to reach an international agreement in the World Trade Organization (WTO). Since the 2008 Farm Bill, the US policies designed by Congress have not put attention on the WTO commitments at the core of the reform. The proposals tabled for the next Farm Bill include replacing the most decoupled direct payments with market linked subsidies, not only in cases of deep losses but in the case of shallow losses. The compatibility of these measures with WTO commitments is uncertain (see section 3.6). Even if Congress makes sure that the US commitments, in particular regarding domestic support are met, the whole orientation of the Farm Bill does not seem particularly motivated by the spirit of reducing distortions in world markets. It is also noteworthy that there is little legal commitment that would indicate that the US will amend its legislation to comply with international commitments, if it was found to be incompatible with international agreements (see EP, 2008 for a clarification of the legal issues).

1.3.3. A not so enviable process

A stronger plutocratic bias. In the EU, with more co-decision and the leading role given to the EP, the 2009 institutional changes brought a breath of democracy to the CAP setting process. The US Farm Bill process, being controlled almost entirely by Congress has always been the product of direct democracy. However, it is difficult to argue that the US procedure is more likely to pass laws that meet the general interest. First, the expertise of the technocracy is less central in the legislative process than in the EU, where the Commission has a central role in the policy design, the impact assessment and the negotiation process between the Council and the Parliament (Cunha and Swinbank, 2011). The US Congress has its own Congressional Research Service, but it not in charge of the management of the policy like the EU Commission; Congress relies on the projections of its Congressional Budget Office, which tend to be based on projections of the current expenditure and not on sophisticated forecasts of market conditions (see section 3.3.2). The expertise of the USDA Economic Research Service, for example, is much less central than the expertise of the EU DG Agri in the policy design process.

Second, and more important, Members of the European Parliament are elected every five years by universal suffrage. By contrast, US Representatives (House) are elected for two years by a limited group of citizens living in small geographically defined districts, making them in permanent electoral campaign (the Senate was supposed to correct this bias in Thomas Jefferson's mind). Orden et al (1999) explain that the two party system and the electoral process that prevail in the US give the farm lobby an influence that goes beyond their actual numerical importance. They show how the US system makes it possible for a limited number of farmers to heavily influence the policy positions taken on agriculture by two candidates whose positions are biased towards those of the median voter. It has been shown that the system contributed to the granting of subsidies to a large array of vested interests (Orden et al, 1999; Sumner, 2007, Smith et al 2012b). As a result, over time, US Farm Bills have piled up layers of different types of payments, resulting in a complex policy whose efficiency is questioned. While the farm lobby is clearly influential in both the EU

Council decisions and within the EP, the institutional setting in the US makes the Farm Bill under a more direct immediate pressure from voters and interest groups.

Compared to the strict budgetary guidelines in the EU, the US supplementary appropriations have often de facto removed the upper limit on the agricultural budget. This results in a lack of transparency on the costs of agricultural policies specified in the Farm Bill, and it allows particular groups to receive funding that was not planned in the normal budget process. For example, the 2007 supplementary appropriations for the cost of the Iraq war included agricultural provisions so as to transfer money to Gulf Coast shrimp harvesters, Florida orange growers, and other agricultural recipients (see EP, 2008; note that the 2008 FCEA passed a "permanent" disaster program to avoid such supplementary appropriations, which have since been reduced).

The influence of coalitions and lobbies. Most economists believe that there is little rationale to allocate some \$995 billion to the Farm Bill over ten years as planned in the current Congress proposals (see section **Error! Reference source not found.**) given the prospects for agricultural incomes. Many of them believe that the current Farm bill programs have poor transfer efficiency and that they mostly benefit a minority of large farms, most of which do not need it (Persson, 2004; Gardner, 2007; Goodwin et al, 2012). Political scientists have stressed the influence of lobbies and coalitions on the size of the farm budget. One reason is that the Farm bill has long been organised so as to match diverging interests, in particular those of the agricultural states and those of the urban areas. This has been largely achieved by the introduction of the welfare programmes (food stamps) within the farm legislation. The alliance for defending large farm programmes includes a even many of the radical fiscal conservatives. Most of them support farm subsidies and ethanol programmes, even if they favour large cuts in the food stamps program.¹⁶

"Broken America"? In both the EU and the US, the decision process is influenced by a variety of interests. In the EU Council, Ministers have often acted so as to maximize the financial interest of their own Member state (farm income, net budget returns and others). Many authors have lamented that CAP decision making has been too often subjected to "*juste retour*" considerations (Alesina and Giavazzi, 2006; Baldwin 2006). In the US, the outcome of the Farm Bill setting is perhaps even more directly influenced by the net benefits obtained by the various States and the various lobbies, in particular because of the institutional settings, the increased politicisation of the two chambers and the tiny majorities that give a central role to the median voter. From this point of view, the 2008 FCEA has been denounced for piling up amendments to ensure support from local interests: when it passed, "*Nearly everyone in Congress got something*" claimed the New York Times from what the Times called "*a disgrace*" and the Wall Street Journal "*a scam*". These editorials considered the Bill as a typical example of the failure of collective action. The US Farm Bill setting procedure can hardly be seen as worthy source of inspiration for the EU CAP design.

¹⁶ In January 2012, the conservative Republican Study Committee released its plan for \$2.5 trillion in budget cuts over the next ten years. Tanner (2012) points out that in this extreme plan, farm subsidies were more or less left untouched. He attributes the fact that 24 of this Committee's members sit on the House Agriculture Committee, and that the districts of those 24 representatives alone received US\$1 billion a year from farm direct payments only, generating considerable vested interests in protecting payments.

2. THE INSTRUMENTS OF US FARM POLICY

KEY FINDINGS

- There are many layers of payments. Some are related to price support (marketing loan programs), others are fixed ("direct payments") or indexed on prices ("countercyclical payments"), or provide compensation for income loss ("ACRE", "SURE") or correspond to crop or revenue insurance.
- The US terminology is misleading and when the proposals for a 2012 Farm Bill claim to "eliminate all direct payments", it is actually only one limited program, the fixed, decoupled payments, that is targeted.
- US Conservation programs are ambitious and quite effective. They are nevertheless particularly targeted by budget cuts (together with the large nutrition programs). The fact that they rely more on land retirement than the EU programs make them politically vulnerable in periods of high commodity prices.
- The combined countercyclical, insurance, disaster and revenue stabilization policies provide considerable protection to farmers against lower yields and prices. In some particular years they generate considerable budgetary outlays.
- The insurance programs are particularly costly. The system is such that the taxpayer bears most of the costs while considerable rents are distributed to intermediaries. The system is so inefficient that some economists estimate that granting public insurance for free would save money.
- The US subsidies remain within the WTO commitments under the Uruguay Round Agricultural Agreement, but the *de minimis* clause is largely used. The cotton case brought by Brazil suggests that a variety of US payments could be challenged in the WTO.

2.1. The main policy instruments to support farmers in the US¹⁷

The breadth of Farm Bills has grown over time and it now includes a variety of food and agricultural interests. The 2008 FCEA, i.e. the current US farm legislation, contains 15 titles covering farm commodity support, horticulture, livestock, conservation, nutrition assistance, international food aid, trade, agricultural research, farm credit, rural development, bioenergy, and forestry, among others. In this section we focus on farm support.

The federal government supports farm income and helps farmers manage risks associated with variability in crop yields and prices through a collection of programs. If we consider the combined effect of commodity price and income support programs (Title I of the FCEA), the federal crop insurance (permanently authorized), and the disaster assistance programs (Title XII), CBO estimates that the combination of these income protection programs has reached \$13.5 billion in 2011 (\$5.7 billion for commodity programs, \$6.3 billion for crop insurance, and \$1.5 billion for disaster assistance). However, this figure is perhaps

¹⁷ Agricultural support in the US was the topic of a specific study published by the European Parliament (EP, 2008).

misleading since most of these payments are conditioned on market conditions, which have been favourable over the recent period, hence the small budget outlays.

Farm support through multiple instruments. The US agricultural policy combines a mix of direct payments, coupled support through guaranteed prices for some commodities (dairy, sugar) and a set of target prices and subsidies that adjust to market conditions.

Producers of program commodities (food grains, feed grains, oilseeds, upland cotton, peanuts, and pulse crops) and milk are eligible for multiple payments; i.e. "direct", "countercyclical" or "ACRE" (exclusive of each other) and "loan deficiency". They also benefit from a minimum guaranteed price through the loan rate, and from support through federal insurance and disaster programs that are subsidised.

Producers of other so-called "loan commodities" (including extra long staple cotton, wool, mohair, and honey) are eligible for marketing assistance loans and loan deficiency payments. Producers of dry peas, lentils, and chickpeas are eligible for countercyclical payments (but not the decoupled "direct payments").

Raw cane and refined beet sugar prices are eligible for price support through supply control and import quotas, as well as direct payments under nonrecourse loans for domestic sugar. Dairy producers benefit from price support and product prices are supported by guaranteed government purchases of nonfat dry milk, cheese, and butter at set prices, and quotas that limit imports. Milk Income Loss Contract (MILC) payments are also made directly to dairy farmers when farm-level milk prices fall below specified levels.

By contrast, producers of fruits and vegetables and livestock producers receive much less support from federal programs. Producers of "specialty crops" (e.g., fruits, vegetables, and tree nut) and livestock receive support through federal crop insurance, and participation in federal disaster assistance programs. Meat producers are only eligible for limited insurance and disaster programs.

2.1.1. Commodity price support and income support

Marketing loan assistance.¹⁸ In practice, the "loan rates" are administratively set prices for each program crop. Farmers use the loans to finance their upcoming crops, with those crops used as collateral. If the market price for the crop is above the loan rate, the producer can repay the loan and keep the balance. If the market price falls below the loan rate, there are several options for farmers to obtain the loan rate rather than the (lower) market price. The government is obliged, at the farmer's option, to receive the crops tendered as collateral into public stocks as full repayment for the loan (termed a "non recourse loan"). But the producer can choose to repay the loan at the "loan repayment rate". Farmers can also take out a "marketing loan" from the government or simply take a payment equal to the product of harvested production and the difference between the loan rate and the loan repayment rate. If the farmer immediately pays back the loan the payment is called a Loan Deficiency Payment (LDP). Farmers can also buy marketing certificates from the USDA available at a price equal to the loan repayment rate (see EP, 2008 for details). In practice, the marketing loan program allows USDA to guarantee that farmers receive at least the loan rate as a producer price for their crop without the need for government to actually take possession of crops. A difference from a traditional system of

¹⁸ Crops eligible include wheat, corn, grain sorghum, barley, oats, upland cotton, rice, soybeans, sunflower, rapeseed, canola, safflower, flaxseed, mustard, sesame seeds, peanuts and pulse crops (dry peas, lentils, chickpeas).

guaranteed prices (like the one that prevailed in the EU until the early 2000s) is that market prices are free to adjust downward to clear domestic and international markets. Historically, this is why the US avoided the accumulation of stocks in periods of low market prices experienced by the EU, and why US products remained competitive internationally at times where the EU ones were not.

Because of the high world prices, the whole system of marketing assistance loans benefit (loan deficiency payments, marketing loan gains and exchange certificates) has not been costly for the budget over the recent period. The expected cost of the programs appears only for \$0.1 billion a year in the 10 year CBO baseline. This program could become much costlier if world prices went down. This system obviously distorts world markets by boosting production in times of low prices, and the corresponding payments are normally classified under the Amber Box in the WTO (see EP, 2012 for details).

Support to sugar production. The US sugar program relies on a high border protection and on restrictions on production in order to maintain high domestic prices.¹⁹ The prices are guaranteed for refined beet sugar and raw cane sugar, associated with limits on sales (in practice the USDA management of domestic production normally keeps US market prices high enough so that the CCC does not buy inventories). The program should be operated at "no cost" to the federal government. Due to supply control and tariffs, it has historically been funded mostly by US consumers through higher prices, in spite of recent changes in the US tariff policy.

Support to dairy production. Three main instruments support US milk price. They include CCC purchases of manufactured dairy products (butter, dry milk, cheddar) in order to ensure that their market prices do not fall below minimum prices.²⁰ Second, indirect export subsidies, in particular through the Dairy Export Incentive Program (DEIP), import tariffs and tariff rate quotas are used to manage foreign trade so as to maintain domestic prices. Third, the system of milk marketing orders involves setting minimum prices at processing plants for various types of milk. This system of milk marketing orders is quite complex because it is applied by regional areas or by states, but revenue pooling and price discrimination by milk marketing orders are supposed to raise the average producer price of fluid milk. Milk producers receive Milk Income Loss Contracts (MILC). These payments are triggered when market prices fall below a benchmark level. MILC payments are based on quantities subject to a specified maximum of milk marketed per farm. Producers receive MILC payments of up to 2.98 million pounds of milk per farm a year if the monthly Boston price falls below a benchmark price (the MILC benchmark can be adjusted upward if prices rise above specified levels based on the calculation of a pre-defined feed ration cost, making MILC payments also a function of the price of feedstuff).

MILC and other dairy assistance account for only \$50 million a year in the CBO baseline. One reason is that the costs of the program are mostly borne by consumers. But the low baseline for MILC suggests that the CBO bets on high dairy prices.

This coupled support is notified as Amber Box support in the WTO (see section 3.6.2 for details). It is noteworthy, though that the marginal reform introduced by the 2008 Farm Bill led to much smaller amounts of Aggregate Measure of Support than in the past while maintaining the core of the price support program (see EP, 2008; 2012).

¹⁹ The sugar support policy also includes a loan program limited to non recourse loans and marketing allotments.

²⁰ The USDA can reduce the minimum prices of these dairy products if government removals exceed specified levels.

"Specialty crops" and organic production. Specialty crops include fruits and vegetables, tree nuts, dried fruits, and horticulture and nursery crops, including floriculture. They are not eligible for the support to program crops. Producers find the current program unfair and they argue that specialty crops products account for more than 40 percent of the value of US agricultural production while receiving little federal support. Organic producers also complain that they receive a very small share of the US farm subsidies.

Specialty crops and organic products account for a very small budget in the CBO baseline, roughly \$0.1 billion a year.

2.1.2. Layers of direct payments

Decoupled payments (or "Direct payments").²¹ A series of direct payments was put in place under the 1996 Act. Like EU direct payments, they were initially a compensation for a reduction in intervention prices. Since 2002, these payments have been based on historical references. These references are nevertheless product specific, unlike the EU Single Farm Payment. The level of these payments is determined as a fixed percentage of a crop-specific direct payment rate multiplied by a farm's direct payment base acres and payment yields. As a result, these payments are not tied to current market prices or yields.

Corn, wheat, soybeans, cotton and rice account for 95 percent of all direct payments. The budgetary expenditure is estimated at \$4.9 billion a year in the CBO baseline, i.e. \$24.8 billion for five years. There is a bit of an "optical" effect in the baseline, since these payments account for most of the cost of the "commodity programs", while CCP, MILC, ACRE and marketing loans have a very low baseline due to market conditions. This might explain why these direct payments are particularly targeted for cuts by Congress.

The decoupled nature of these payments and their eligibility for the Green Box in WTO notifications was challenged by Brazil in the particular case of cotton (see section 3.6.2).

It is worth noting that the term "direct payments" is often misleading in the US, especially when Congress and the media claim that a given proposal for the 2012 Farm Bill will "eliminate all direct payments". In practice, most of the time it is only these fixed, decoupled payments that are targeted, not the whole set of direct payments.

Counter cyclical payments or CCPs.²² At the end of the 1990s and the early 2000s, Congress introduced a series of coupled payments in order to respond to low international prices and a strong US dollar as well as a peculiar political situation (the troubled end of the Clinton administration, see section 1.1.2.). The 2002 Act transformed these exceptional payments to a more permanent regime of "countercyclical payments" (CCPs). These payments compensate the difference between a target and production prices and are based on historical acreage references and a national season-average farm price of the commodity. Payments under this program are triggered whenever the market price ("season-average" price) is less than the effective target price. Effective target prices are the difference between target prices and direct payment rates. Note that these payments are incompatible with the eligibility to the ACRE program described below.

Even though they are based on fixed references, these payments depend on market prices and have so far been notified in the Amber Box in the WTO (see section 3.6.2 for details).

²¹ Crops eligible include wheat, corn, grain sorghum, barley, oats, upland cotton, rice, soybeans, sunflower, rapeseed, canola, safflower, flaxseed, mustard, seed, crambe, and sesame seed and peanuts.

²² The same crops are eligible as in the Marketing loan benefits program.

These CCP currently represent limited budget outlays, given the high level of world prices. In the CBO baseline, CCPs account for \$0.2 billion a year.

2.1.3. Income protection programs

In addition to the marketing loans program and the CCP, three other types of payments are triggered when farmers face adverse price and/or yield conditions. The ACRE program, the system of crop insurance, and disaster payments have become "permanent" programs under the FCEA.

Average Crop Revenue Election. The ACRE program guarantees 90 percent of the historical receipts of the farm, provided that farmers give up CCP and 20 percent of the direct payments as well as a fraction of other variable payments. The way ACRE operates is particularly complex (see a complete description in EP, 2008). In brief, the payments vary inversely with state level revenue relative to crop benchmarks. The crops eligible are the same as for the CCPs.

In the current context of high prices, this program has not attracted many farmers, compared to what was initially expected. As a result, budgetary expenditure has remained limited. It accounts for \$0.5 billion a year in the CBO baseline. These payments are crop specific and depend on current receipts, justifying notification under the Amber Box.

Insurance. The federal government provides and subsidizes several risk management tools to address losses in both revenue and crop yields. Indemnities are paid when yield or revenue drops below guarantees established prior to planting. The federal government pays more than 60 percent, on average, of the farmer's crop insurance premium (see section 2.5.5 for an assessment of the program).

The functioning of the crop insurance program relies on a voluntary approach. The producer selects the crop covered by the policy, the percentage of yield loss covered and the percentage of the market price of the crop covered. The minimal option is "catastrophic" crop coverage. This is a cheap option, since taxpayers bear the total cost of the premium for this coverage. The producer receives a payment for a loss greater than 50 percent of normal yields and 55 percent of the estimated market price of the crop. Beyond that, producers can buy higher levels of coverage, with different options, covering up to 75 percent of yield losses and 100 percent of the estimated market price for a particular crop. The main yield-based policy is the "Actual Production History" crop insurance. It insures producers against yield losses due to climatic or phytosanitary conditions. The amount of the payment a producer receives depends on the level of yield loss and price protection the producer has elected.

Revenue-based insurance policies insure a target level of revenue based on the market prices of the covered crop and the producer's yield history. As with yield-based policies, the producer can select higher levels of revenue insurance (Summer and Zulauf, 2012). The producer receives a payment when his or her actual revenue falls below the insured target level of revenue if the producers experience a loss of yield, a decline in prices, or some combination of both.

The government also funds the operating and delivery costs. "Administrative and Overhead" payments to private crop insurance companies are provided to cover the cost of administering the program (agent commissions, the cost of adjusting losses, office expenses). These payments are set as a percentage of the policy premia.

The federal government also acts as a reinsurer in two ways: by providing overall stop-loss coverage and, to some extent, copayments for losses on each company's aggregate book of business, and by accepting most of the risk for policies placed in an assigned risk.²³

In its baseline, the CBO projects that the crop insurance program in its current form would cost, on average, \$8.9 billion per year through 2022.

Non insured Assistance Program. The Noninsured Crop Disaster Assistance Program (NAP) covers the case of severe crop yield losses in regions where crop insurance is not available. The cost for the federal budget is estimated by the CBO to be an average \$0.1 billion a year.

Disaster assistance includes the Supplemental Revenue Assistance Payments Program (**SURE**) as well as **four additional disaster programs** for livestock, forages, honey bees, farm raised fish, fruit trees and vines.²⁴ At the time of the FCEA, the US Congress had multiplied the payments for disaster over the last 10 years. The concept of disaster has become quite flexible, with larger payments taking place in electoral campaign years (Chite, 2008a; Smith, 2012a). These payments were sometimes very large and introduced considerable volatility in the US agricultural budget. With the 2008 Farm Bill, the multiannual system of payments "SURE" was implemented. To be eligible for SURE payments, a producer must also insure each of the economically relevant crops produced on a farm using a federally subsidized crop insurance product; if such a product is not available, then the crop must be insured using the NAP. SURE payments are based on whole-farm crop revenue shortfalls not covered by crop insurance. In the other programmes, payments cover losses due to adverse weather or other conditions (e.g., wildfire).

In spite of SURE, the **ad hoc disasters payments**, funded by supplementary appropriations, have persisted, albeit with lower budgets than in the past. In such cases, payments and eligibility are determined in an *ad hoc* way by policymakers, for each disaster bill. In particular, with the 2012 drought, the House of Representatives passed a bill (HR 6233, August 2012) that would provide supplemental funding for agriculture disaster aid by retroactively reauthorizing expired disaster assistance programs for fiscal year 2012. As we write (September 2012) the Senate has not passed a similar bill. Because of the budget stabilizers, the House proposes to offset these costs with a reduction in spending for conservation programs.

Authority for disaster assistance ended with the end of the 2008 FCEA. Therefore the CBO has not accounted for SURE and the related programs in its baseline, but the Congressional Research Service notes that the average annual costs for 2008-2011 were around \$1.5 billion a year (see Monke et al, 2012).

²³ The Standard Reinsurance Agreement and the Livestock Price Reinsurance Agreement are cooperative financial assistance agreements between the Federal Crop Insurance Corporation (FCIC) and an insurance company. FCIC is a government corporation within USDA authorized to carry out programs of the Federal Crop Insurance Act. The Risk Management Agency acts on behalf of FCIC to administer all Federal crop insurance programs. The Standard Reinsurance Agreement and the Livestock Price Reinsurance Agreement establish the terms under which FCIC provides reinsurance and subsidies on eligible crop insurance contracts sold by the insurance company.

²⁴ These are the Assistance Program for Orchardists and Nursery Tree Growers; the Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish Program; the Livestock Forage Disaster Program; and the Livestock Forage Indemnity Program.

2.2. Conservation and environment

Agricultural support in the US also takes the form of payments whose primary objective is to support environmental conservation. Many of the conservation programs were first enacted as part of the 1985 Farm Bill. In all cases the approach relies on voluntary farmer participation encouraged by providing land rental payments, cost-sharing conservation practice implementation, technical assistance, education, and basic and applied research. One can distinguish "working land" programs that allow land to remain in production and "land retirement" based programs.

Currently more than 20 agricultural conservation programs are administered by USDA but two programmes represent the main share of the budget, the CRP (Conservation Reserve Program) and the EQIP (Environmental Quality Incentives Program). The CRP is the main land retirement program. Its initial objective was to limit erosion, but now it also plays an important role in the preservation of biodiversity and water quality. The CRP provides annual rental payments to producers to replace crops on highly erodible and environmentally sensitive land with long-term resource conserving plantings (10 to 15 years). Bids to enrol land are solicited during a limited time period, and then compared using an Environmental Benefits Index. Those with the highest Index scores are accepted. Other land retirement programs include the Wetlands Reserve Program, the Farmland Protection Program, the Grassland Reserve Program, and Healthy Forests Reserve Program.

The EQIP promotes environmentally friendly agricultural practices. It is the main working land program, i.e. a program that keeps the enrolled area in productive use. It provides cost share and incentive payments to producers and owners to plan and install structural, vegetative, and land management practices on eligible lands to alleviate conservation problems, with 60 percent of the funds targeted to livestock producers. Current priorities include reduction of non-point source pollution, conservation of ground and surface water, improvement of air quality, reduction of soil erosion, and the promotion of at-risk habitat conservation. Water quality takes the largest share of EQIP's budget. EQIP also helps farmers meet regulatory requirements of the Environmental Protection Agency, such as obtaining permits for concentrated animal feeding operations. To enrol in EQIP, farmers submit an application describing the prospective program land, the resource concerns addressed, and the planned measures. Other working land programs include the Conservation Stewardship Program (CSP), the Wildlife Habitat Incentives Program, the Agricultural Water Enhancement Program and the Agricultural Management Assistance program.

Under the FCEA, some regional programs and some more minor conservation programs are also funded (Chesapeake Bay Watershed Program, Cooperative Conservation Partnership Initiative, Conservation Innovation Grants, conservation technical assistance, Great Lakes Basin Program, regional equity, Voluntary Public Access and Habitat Incentive Program, and Grassroots Source Water Protection Program).

There is also a degree of cross-compliance in the US policy, even though it is less central than in the EU. Some conditions must be respected for highly erodible lands and wetlands, otherwise farmers cannot receive some federal program benefits such as federal insurance programs (these provisions are known as sodsaver and swampbuster).

In the CBO baseline, conservation titles amount to \$31 billion for the next five years, i.e. roughly \$6 billion a year. Almost half of this amount corresponds to the CRP, and the bulk corresponds to three other programs (CRP, EQIP and Conservation Security Program).

Funding for the Wetlands Reserve Program and the Grasslands Reserve Program are considered zero after the next two years because the funding for these programs expires at the end of the 2008 Farm Bill.

2.3. Nutrition

Title IV for nutrition accounts for more than two thirds of the planned expenditures under the whole FCEA. This is explained by the fact that, in the US, the food stamps program is the major welfare program. The largest budgetary item by far is the financing of what was called the Food Stamp Program, which was renamed in the FCEA as the Supplemental Nutrition Assistance Program (SNAP). SNAP accounted for 73 percent of all Federal food and nutrition spending in FY2011. Other programs include the Emergency Food Assistance Program (TEFAP), the Commodity Supplemental Food Program (CSFP) and the Food Distribution Program on Indian Reservations (FDPIR). In addition to food stamps, these programs fund the delivery of fresh fruits and vegetables in schools and demonstration projects to fight obesity. They also support innovative food projects, improve distribution of food, supplement low income elderly, and fund food assistance programs.

Nutrition programs are particularly targeted for cuts in the debates on the 2012 Farm Bill, due to their importance in the overall budget, but the legal status of their funding differs. Most domestic nutrition assistance programs are treated as mandatory entitlements for budget purposes. As an appropriated entitlement, SNAP is limited to spending those funds that are specifically appropriated, though. The CSFP, the administrative and distribution cost component of TEFAP and the amount set aside for the FDPIR are discretionarily funded programs.

The SNAP accounts for \$400 billion over five years in the CBO baseline. It is noteworthy that other nutrition titles do not appear in the CBO baseline. The reason is that programs such as children nutrition programs are not addressed or reauthorized in the context of the ongoing Farm Bill.²⁵ Their cost is nevertheless very large, averaging some \$24 billion a year in addition to the SNAP (Monke et al, 2012).

The budget corresponding to the nutrition programs is notified under the Green Box in the WTO. A long lasting controversy within the bodies that monitor agricultural policies such as the OECD, is whether or not food stamps programs should be treated as farm subsidies (see EP, 2012 for an extensive discussion on this issue). However, given that any welfare program also leads to an increase in demand for farm products, programs that subsidize food for domestic consumers are included neither in the OECD Producer/Consumer Support Estimates nor in the WTO Aggregate Measurement of Support

2.4. Other forms of public intervention

The Farm Bill addresses a variety of programs other than farm support. However, the complex nature of the funding of these programs is such that not all of the related costs appear in the CBO baseline.

²⁵ The nutrition program for Women, Infants, and Children (WIC), the National School Lunch Program, National Breakfast Program, Child and Adult Care Food Program, Special Milk Program, as well as other programs located in the Child Nutrition Act were reauthorized in December 2010, in the Healthy, Hunger-free Kids Act.

2.4.1. Rural Development

Title VI of the FCEA supports a range of programs including: i) the infrastructure of rural areas with respect to housing, electricity, water and wastewater, and community capacity; ii) agricultural development; and iii) rural business creation and expansion. The FCEA also deals with regional development strategies and supports innovative business development (e.g., bioenergy, value-added production, local food production) or the mechanisms to finance them (e.g., Rural Microentrepreneur Assistance Program). Smaller budgets support local or regional food products sold less than 400 miles from origin, community based housing development organisations and a Rural Collaborative Business Investment Program as a financial vehicle to develop and implement local strategies for innovation. In practice, federal funds are mostly used for programs providing assistance in the areas of broadband and telecommunications, water and wastewater infrastructure, business and community development including child care as well as tribal college and university facilities, and regional development measures (Mississippi delta and Northern Great Plains).

Mandatory funding is limited to two programs, the Value-Added Product Grants (\$15 million) and a one-time funding of pending water and waste water projects (\$120 million), and to one new instrument, the Microenterprise Assistance Program (\$15 million). Other programs such as the Rural Strategic Investment Program are authorized only with discretionary funds. In the CBO baseline, rural development appears only through a very small outlay for funding rural micro entrepreneur assistance.

2.4.2. Research

Four agencies carry out USDA's research, education, and economics mission: The Agricultural Research Service, the USDA's own science agency; the National Institute of Food and Agriculture, a science agency which distributes federal funds to land-grant universities and other outside partners for state and regional-level research, education, and extension activities; the Economic Research Service (ERS), which provides economic analysis of issues regarding public and private interests; and the National Agricultural Statistics Service. In the FCEA, the budget includes a large scale program for competitive grants and special programs for specialty crops and organic agriculture. Land grant institutions (universities) are also funded but have to compete for federal dollars. The administrative organization of the coordination of federal research is now ensured by the Research Extension and Education Office which coordinates the work of the USDA agencies as well as extramural research. Several particular research programs are also included in other titles of the FCEA, including those on energy and rural development. They focus on issues such as research on antibiotic resistance, foot and mouth disease, or bioenergy. Due to the nature of credits, the research budget does not appear in the CBO baseline (the research Title amounts to \$0.02 billion).

2.4.3. Forestry

The current legislation under the FCEA includes programs that support forest conservation, prevent illegal logging and restore forests after disasters. The Community Forest and Open Space Conservation Program offers grants to local governments, tribes or non-profit organisations to acquire forest lands with public benefits if they are threatened to be converted to other uses. Due to the nature of its funding, the forestry budget does not appear in the CBO baseline.

2.4.4. Trade

The FCEA ended the Export Enhancement Program, a major export subsidy program. Some minor programs still exist, i.e. the Market Access Program which promotes high value exports and the Foreign Market Development Program as well as the Technical Assistance for Specialty Crops program, which focuses on eliminating sanitary and phytosanitary barriers to US agricultural exports. Export guarantee programs, which are accused of acting as significant export subsidies by third countries, were revised so as to make them more compliant with the WTO ruling on cotton (see section 3.6).

Food aid has long been used as a way to complement, and therefore subsidize, US exports in the past. The FCEA authorizes \$2.5 billion to be appropriated annually for P.L. 480 Title II, which provides US commodities for emergency relief and development projects overseas. The P.L.480 law funds only the purchase of US commodities (in kind aid). There is an option of selling this aid in recipient countries in order to finance development projects. While development organisations criticize this type of in kind aid using production sources in the donating country, Congress has consistently resisted changes.

The CBO baseline does not seem to include all the provisions of the Trade title. The baseline amounts to an average of \$0.3 billion a year over the next decade (the USDA budget outlays under P.L 480 amounted to some \$1.8 billion in 2011). The reason for this discrepancy could be that programs under the "Food for Peace Act" (the new name of the P.L. 480) are not considered to fall under the authority of the Farm Bill authorizing committees.

2.4.5. Credit

The federal government provides credit assistance to farmers. The current legislation authorizes programs supporting loans for operating farms, for joining conservation programs and for accessing farm ownership, focusing on new and socially disadvantaged farmers needing to cover high start up expenses. The Farm Service Agency of the USDA is a lender of last resort for farmers and has a mandate to target loans to disadvantaged groups and for beginning farmers. It issues direct loans to farmers who cannot qualify for regular commercial credit, and guarantees the repayment of certain loans made by other lenders. The Farm Credit System is a second agricultural lender which is connected to the federal government. It is a network of borrower owned lending institutions operating as a government-sponsored enterprise. It sets up a pilot program for beginning farmers, and puts into law a decision for compensation of minority farmers that were found to be discriminated against. A third agricultural lender with a federal mandate is Farmer Mac, which is privately held, and provides a secondary market for agricultural loans.

The statutory authority for FSA, FCS, and Farmer Mac is permanent. The Farm Bill can make adjustments to eligibility criteria and the scope of operations. The funding for credit does not appear in the CBO baseline.

2.4.6. Energy

The FCEA includes grants, loans, and loan guarantees to foster research on agriculture-based renewable energy. The Farm Bill, nevertheless, only complements the legislation on biofuels, which is mostly under the Energy Act. The overall budget of Title IX is \$643 million for the 2008-2012 period, but several important policy measures include changes in regulations that do not involve budgetary outlays. The FCEA continued some programs

such as the Biomass Research and Development and created new programs such as the Biomass Crop Assistance Program, the Agricultural Bioenergy Feedstock and the Energy Efficiency Research and Extension Initiative. The main initiatives focus on supporting biomass research, federal purchase of biobased products, funding pilot plants and demonstrations for biofuels. Biorefinery assistance funding for land guarantees to produce biofuels, and the production of advanced biofuels are allocated most of the budget. It is noteworthy that the Feedstock Flexibility Program for Producers of Biofuels authorizes the use of CCC funds to purchase surplus sugar, to be resold as a biomass feedstock to produce bioenergy, which could have the significant effect of supporting the sugar sector.

Due to the nature of expenditures and the nature of funding, energy expenditures only account for \$0.2 billion for five years in the CBO baseline.

2.4.7. Other

The FCEA includes many other provisions in a somewhat heterogeneous "Title XIV". Among a variety of measures, the FCEA created an Office of Homeland Security within the US Department of Agriculture in order to better coordinate the efforts against terrorism and agricultural disease with the various agencies already in charge, and funds a program of research through competitive grants. Title XIV also includes a limited budget for socially disadvantaged producers, linked to various institutions dealing with minorities and outreach.

2.5. An evaluation of the current instruments

Over time, the US policy has shifted from programs that restricted supply and were tied to low prices, to programs that compensate for revenue losses. Despite repeated debates about replacing the many programs with a single program (e.g. replacing crop insurance was one of the motives for the introduction of ACRE during the 2008 Farm Bill) new programs have progressively been added to the existing ones. This has resulted in a multiple layer form of intervention with questions regarding overlapping and efficiency (O'Donohue et al, 2012; Goodwin et al, 2012). The evaluations of the conservation programs have in general been quite positive, even though questions persist regarding windfall gains for farmers. While there is no doubt that the nutrition programs provide an essential support to the poorest segment of the population, the evaluations are mixed regarding whether the current programs are the most cost efficient way to do so.

2.5.1. The overall budget costs of the Farm Bill

If one looks at the FCEA planned budget, the largest title was by far the nutrition program which was supposed to cost taxpayers \$38 billion a year, followed by the support to commodities (including direct payments, marketing loans and countercyclical payments) for \$8.4 billion, conservation for \$4.8 billion and crop insurance for \$4.4 billion (see EP, 2008).

While the cost of the FCEA in the 2007 CBO estimate was to be, on average, \$56.7 billion a year, the figure for agricultural expenditures in the Federal budget for the year 2011 (source, White House budget) turned out to be \$139.4 billion. The gap does not only correspond to higher expenditure than expected, but mostly to the fact that the CBO estimate covers only the mandatory spending under the Farm Bill, while the budget includes both mandatory and discretionary expenditure including for farm programs that are not under the authority of the committees involved in the Farm Bill.

The gap between the two figures nevertheless shows that the costs of the nutrition programs have far exceeded the initial forecast (\$94.6 billion for all nutrition programs, against a planned \$37.7 billion of mandatory programs covered by the CBO projection) and that the cost for the federal budget of crop insurance programs has been higher than what was expected (\$6.3 billion instead of \$4.7 billion). Details are given in Appendix 1.

2.5.2. An assessment of the nutrition programs

Costs. The item whose cost had been most underestimated when the FCEA was designed is the nutrition title. The economic crisis has put more people in dire conditions, and more and more rely on the food stamps program. During FY2011, an average of 44.7 million persons per month participated in the SNAP program, the largest number ever to participate and 11 percent more than during the previous year (Alston, 2012). On average, 14 percent of Americans participated in SNAP each month during FY2011. In June 2012, Bloomberg reported that food stamp use reached a record 46.7 million people. Benefits per person averaged almost \$134 per month (ERS, 2012). The number of participants to other large scale program (i.e. National School Lunch Program or NSLP, Special Supplemental Nutrition Program for Women, Infants, and Children or WIC, the School Breakfast Program, and the Child and Adult Care Food Program) also increased. Overall, one fourth of US citizens are eligible for at least one of the fifteen nutrition programs.

Federal expenditures for USDA's domestic food and nutrition assistance programs totalled \$103.3 billion in FY2011, or 8 percent more than in the previous fiscal year. Federal spending for the SNAP program alone reached \$75.3 billion.

Functioning. Nutrition programs have several objectives. One of them is to provide adequate nutrient intake to the population at risk of undernutrition (it is the primary objective of the SNAP). They also aim at improving the nutritional choices of recipients, fighting obesity and promoting education towards healthier food choices. These programs were also originally introduced to dispose of agricultural surplus. This explains why these programs, which target mostly the urban population and have welfare and health as the main objectives, are part of the Farm Bill even if, today, the pairing of nutrition and farm program policies appears incongruous.

Assessments of the program show obvious welfare benefits brought by the program. The SNAP increases household availability of energy and protein and contributes to the intake of some vitamins and minerals (ERS, 2012). A question is whether this would have been achieved more efficiently with cash transfers rather than food coupons. Evaluations show that the SNAP program increases household expenditures on food by slightly more than if the same dollar value had been provided as cash instead of coupons (Alston 2012). Alston suggests that SNAP benefits are more effective than cash transfers for reducing food insecurity and hunger, but Fox et al (2004) are not conclusive. There is evidence of the effectiveness of WIC to increase mean birth weight, reduce the incidence of low birth weight, and decrease birth-related medical costs, especially among the black population near the poverty line and the lowest income women. Children who participated in the NSLP increased their consumption of milk, vegetables, and fruit and fruit juices and decreased their consumption of sweets and snack foods, but the effects are limited on other food groups (Bitler and Currie, 2005).

There has been some claims that that the federal nutrition programs have contributed to obesity by encouraging the consumption of carbohydrates and fats. Studies on the effects

of food stamp program participation on obesity rates have yielded mixed results. Participation in the program might contribute slightly to increases in obesity among women (Alston et al, 2008, Alston, 2012).

2.5.3. An assessment of conservation programs

Costs. Conservation programs include all conservation programs operated by the Farm Service Agency and the Natural Resources Conservation Service that provide direct payments to producers. Overall, the 20 conservation programs are estimated to have cost close to \$5 billion a year over the recent period, with an increasing share of the funds being allocated to working-land programs like CSP and EQIP, for which the budget has steadily increased from \$1 billion in 2004 to \$2.1 billion in 2011.

The CBO baseline predicts an average government outlay of \$6.4 billion for the next years if the current programs are maintained. This includes the fact that there are five conservation programs without a budget baseline, including the Wetlands Reserve Program, which enrolled 3 million acres in 2012. Should this program continue, it would add some \$0.5 billion to the CBO baseline each year. The Grassland Reserve Program, the Voluntary Public Access and Habitat Incentive Program, the Small Watershed Rehabilitation Program and the Desert Terminal Lakes would push the total additional cost to \$0.6 billion each year (Stubbs, 2012a, 2012b). Note that the Congress seems to be willing to cut the cost of conservation programs in the next Farm Bill (see the House and Senate proposals in section 3.3).

Functioning. In 2008, the FCEA reduced the CRP maximum acreage, but expanded the EQIP budget. This showed a shift towards the "working land" programs that Congress tends to support because of the high demand for agricultural products. Because working-land subsidies are also available to livestock producers, the shift of the focus towards these programs is also a response to lobbying for government help in managing livestock waste by beef, poultry, dairy, and hog producers. Assessments of the benefits of the CRP show a good record of the program in terms of conservation. Estimates by the USDA suggest that the positive impacts of the CRP outweigh its cost. Average annual social benefits for the period 1985-2005 were estimated to lie around \$800 million, taking into account direct costs, commodity program savings, and improvements in soil productivity, water quality, and wildlife habitat as well as reduction in wind-blown dust (DelaTorre-Ugarte et al., 2006; Heimlich, 2007, based on several other studies including numerous USDA evaluations). The increase in agricultural prices is a matter of concern for enrolment in the CRP.

Most of the assessments of EQIP are also positive (see EP, 2008; Peace, 2008). A critique of such working land programs is nevertheless the limited connection of the payments to actual environmental performance. The expected benefits of the measures are insufficiently supported by impact measurements. Some resource concerns such as water quality issues or wildlife habitats would be better addressed if contracts with several farmers on a particular area were taken as a whole (Antle, 2007). Finally, there seems to be some overlap in the programs. In particular, working-land and land-retirement programs tend to compete with one another for the same land.

2.5.4. An assessment of commodity and income support

Cost. Marketing loan benefits have cost almost nothing over the recent years (there has been some minor expenditures for wheat and cotton). The cost of the ACRE program was also lower than expected due to low enrolments, themselves linked to the good market

conditions. As a result, ACRE payments hardly exceeded \$10 million. For 2012, dairy producers are expected to receive \$170 million in MILC payments (source ERS USDA). Tobacco farmers and quota holders are expected to receive \$646 million from the Tobacco Transition Payment Program in 2012.

Table 1 shows that, in general, all the payments that are related to market conditions have had small budgetary outlays in 2011. The fixed payments and the conservation payments stand out as being the only ones with large budgets over the past year. This explains why they are the ones most targeted for cuts by Congress.

Table 1. Direct government payments (actual outlays)

	2008	2009	2010	2011
Total direct payments	12242	12178	12398	10569
Fixed direct payments	5110	4727	4813	4712
ACRE			422	10
CCP	712	1170	209	17
LDP	85	156	114	8
Marketing loans gains	34	252	2	0.3
Certificate exchange gains	202	686	1	
MILC payments	0	880	52	1
Tobacco transition payments	816	796	687	665
Conservation	3155	2835	3452	3590
Supplemental and ad hoc assistance	2121	648	2648	1564

Source: USDA, ERS. Preliminary figures for 2011. Note: payments paid directly to farmers within the calendar year only. All conservation programs included except the Emergency Conservation Program. SURE payments are included in "assistance".

Issues with the various forms of commodity and producer support. The multiple layers of US support have different degrees of efficiency (see EP, 2012 for a full analysis).

Direct payments. The fixed "direct payment" scheme provides rather minimal distortions to producer decisions. Analyzing the behaviour of a sample of soybean producers in detail, Babcock (2007) concludes that US producers view the direct payments as truly decoupled and that producers make their planting decisions following market signals. Other empirical studies find some impact on farmer behaviour through wealth and liquidity effects (Alston, 2007). Nevertheless, in all forms of commodity support, the direct payments are clearly those that generate the fewest market distortions.

CCPs. Like direct payments CCPs are determined from past planting and yields. They are hence independent from producer's individual decisions, but they vary inversely with market prices (if they are above loan rates). As most producers are risk averse, CCPs have some impact on production and encourage producing more, including on marginal land (Lin and Dismukes, 2007).

Marketing loans. The marketing loan system and the related payments are linked to current production or factor use. These coupled payments still play a major role in current US agricultural policy. Marketing loans provide minimum price guarantees for crops actually produced, even though commodities are no longer physically delivered to the CCC. The system of LDPs, marketing loan gains and marketing certificates works as a minimum price

guarantee applied to producers. Such programs provide direct incentives to produce more through a guaranteed price.

Sugar support. The US sugar program raises rather little political debate, since cane and beet growers stress that it is costless for taxpayers. However, Wohlgenant (2012) estimates that the costs to US consumers have averaged \$3 billion per year, with producers benefiting by about \$1.7 billion per year, due to the multiple deadweight losses that are linked to supply control. The program has also been criticized for its inefficient management of the tariff quotas (GAO, 2000). Wohlgenant (2012) estimates that in most years, the sugar program has caused world market prices to be about 8.5 percent lower than they would otherwise be. On the equity side, while all individual consumers contribute to the program in a moderate amount, the benefits are concentrated on a very small number of large producers (in sugar cane production). Sugar beet production accounts for about 55 percent of total production and is less concentrated but rents are also significant (Wohlgenant, 2012).

Dairy support. The combination of price support and production management as well as payments makes the dairy policy particularly complex, with the combination of CCC purchases, MILC payments and marketing orders. Additional instruments such as a high level of border protection and the Dairy Export Enhancement, the Dairy Indemnity, the Dairy Promotion and Research programs add to the complexity. So does the management of the different types of milk under Milk Marketing. Baltagas (2012) and Goodwin et al (2012) consider that key elements of the dairy policy are both outdated and cost inefficient. The early justification for marketing orders—to countervail potential market power by fluid milk processors—is now questionable given the emergence of dairy cooperatives as the major source of US milk production. Baltagas (2007) shows that the program tends to make producers in some parts of the country worse-off. The dairy price support program costs taxpayers \$384 million annually for purchases that do not affect the price of milk in a significant way.

ACRE payments. Because of the use of a moving price average as a reference, ACRE is more a "smoothing" instrument in the case of a poor year than a permanent support program. The conditions of giving up 20 percent of their direct payments (and the CCPs) and the perspective of high prices limited the enrolment in the ACRE program. It is mostly wheat farmers who are enrolled.

Many analysts have criticized the ACRE program for a variety of reasons. They consider it to be a potential fiscal bomb, given that, depending on market conditions, the cost of the program could easily reach some \$6 billion or even \$10 billion for a particular year (Orden et al, 2008; 2011). While this projection has so far not materialized, extending the program, or using it as a basis for similar types of "shallow loss" payments could quickly become a considerable budgetary problem. Second, they find the program inefficient, due to the fact that all acres of the total base could possibly receive payment provided that one or two crops are eligible and the total area planted to those one or two crops is less than the farm's total base acres (Smith et al 2012a). Finally, the payments could vary dramatically from one year to the next, adding billions of dollars to US Amber box support in some years.

2.5.5. An assessment of risk related programs

Costs of insurance and disaster programs. The cost of insurance programs for the taxpayer has increased over time, as the coverage of the program expanded. The crop

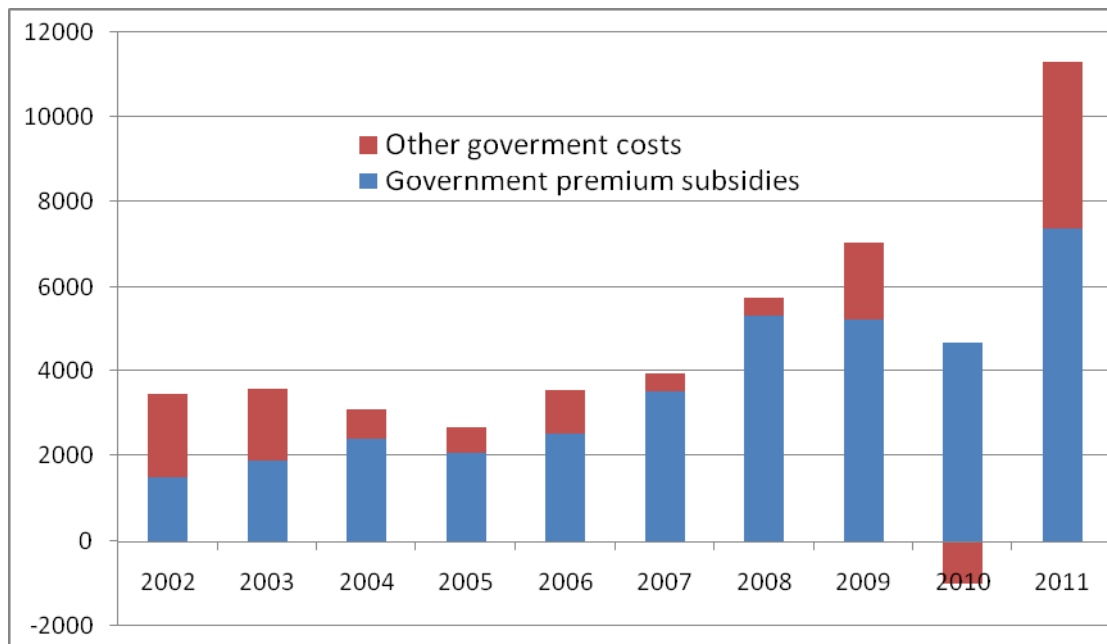
insurance program now covers more than 100 crops, including most major crops, many specialty crops, and some livestock. Net insurance payments (indemnities minus premia), which had not exceeded \$1 billion before the mid 2000s, were \$5.6 billion in 2011, exceeding direct payments to US farms (Sumner and Zulauf, 2012; EP, 2012). The public's share of insurance premia has soared from \$1.5 billion in 2002 to \$7.5 billion in 2011 (Table 2). The government also subsidized the delivery cost subsidies, for \$1.4 billion in 2011. Reinsurance is also funded by taxpayers, and the cost averaged \$1.4 billion from 2005 to 2009. Because of public reinsurance, the cost of the system could be enormous in years of very poor harvest, such as 2012 (see Box 4).

Figure 1 shows the costs of premium subsidies and operating costs paid by the Risk Management Agency (RMA) since 2002. It is noteworthy that programs other than insurance, in particular ACRE and SURE have also been introduced to augment this policy in 2008, but that the costs of insurance programs have nevertheless inflated.

Table 2. Crop year government costs of federal insurance (million dollars)

Crop year	Total premium	Premium paid by farmer	Premium subsidy	Indemnity	Loss ratio	Administrative expense reimbursement	Estimate of total cost for government
2005	3950	1617	2344	2370	0.60	833	2591
2006	4580	1906	2682	3504	0.77	962	3465
2007	6562	2745	3823	3548	0.54	1335	3792
2008	9851	4171	5690	8680	0.88	2013	7717
2009	8951	3530	5426	5230	0.58	1619	5664
2010	7592	2891	4711	4252	0.56	1371	4724
2011	11957	[4348]	7453	10833	0.91	[1383]	[11209]

Source: RMA. <http://www3.rma.usda.gov/apps/sob/national.cfm>. Note that estimates of premium paid by farmers, administrative expense reimbursement and total costs for government expenditure come from <http://www.rma.usda.gov/aboutrma/budget/costsoutlays.html>. The total government expenditure is the sum of the premium subsidies, the administrative expense reimbursements, administration and other program costs, minus the claims paid above income. Rows do not add up due to the excess income loss claims and interest. Brackets indicate preliminary estimates from <http://www.rma.usda.gov/aboutrma/budget/costsoutlays.html>.

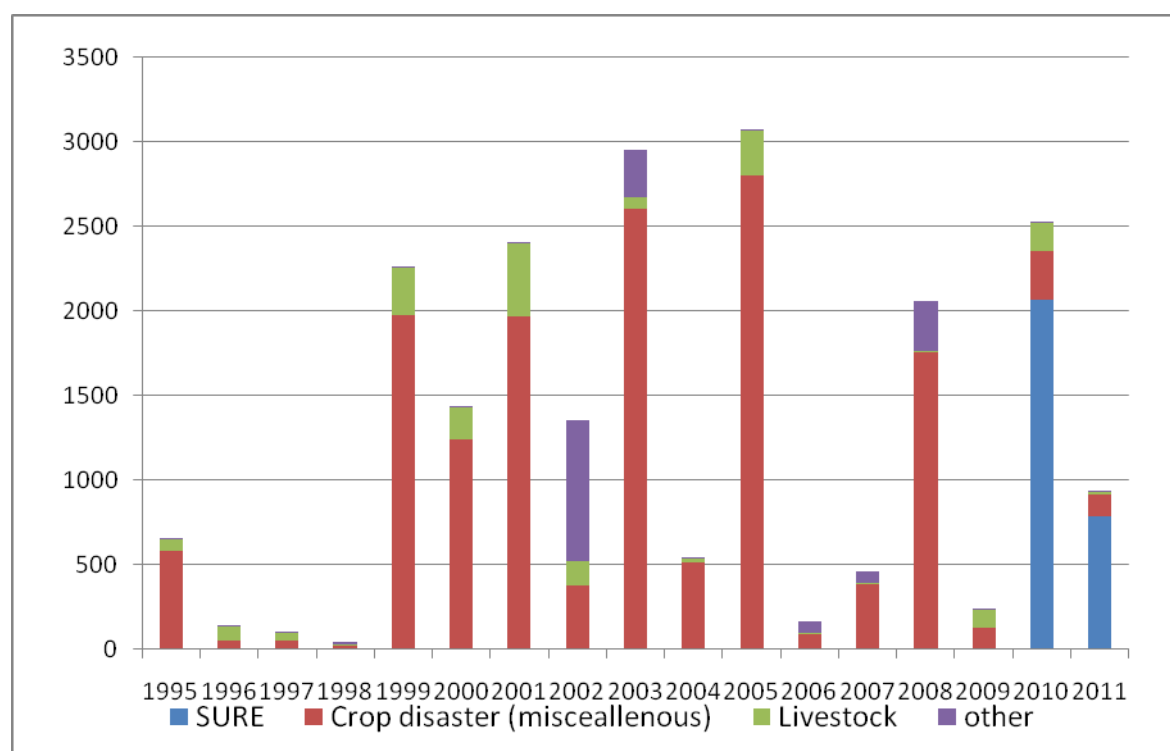
Figure 1. Government outlays for federal crop insurance programs

Source: RMA data. 2011 figure is an estimate by USDA RMA. Other government costs include administrative expenses reimbursements and other administrative and operating fund costs.

<http://www.rma.usda.gov/aboutrma/budget/costsoutlays.html>

Between 1995 and 2009, Congress provided nearly \$19 billion in *ad hoc* disaster relief to US farmers (Smith et al, 2012a). EP (2008) showed that these costs have been so frequent that they tended to become a way to support farmers by circumventing the standard budget procedure. Congress introduced the "Supplemental Agricultural Disaster Assistance trust fund" with the objective to make disaster insurance available and to reduce the need for *ad hoc* appropriations. This fund covers the SURE program, the Livestock Forage Disaster Program, the Livestock Indemnity Program, the Tree Assistance Program, and the Emergency Assistance Program for livestock, honey bees, and farm raised fish.

When the FCEA was introduced, it was anticipated that the SURE program would cost \$0.4 billion a year in the CBO baseline. In 2010, the first year the SURE program was enacted, it actually resulted in \$2 billion of outlays. The outlay was \$0.8 billion in 2011. The implementation of a "permanent" disaster program did lead to a reduction in the *ad hoc* disaster payments (Figure 2).

Figure 2. Disaster payment paid to farmers, 1995-2011, \$US billion

Source: ERS, USDA and EWG.

http://farm.ewg.org/progdetail.php?fips=00000&progcode=total_dis

Assessment of the insurance programs. The use of crop insurance by US farmers has grown sharply, increasing from 45 million insured acres in 1981 to 262 million in 2011 (source RMA). Insured liability shows a sharper increase, rising from \$6 billion in 1981 to more than \$113 billion in 2011. Many analysts claim that the very large degree of subsidization of the program makes insurance very attractive for farmers, while a large share of the money is wasted in the process.

The programs generated considerable costs for the risk reduction they achieve (Babcock and Hart, 2006; Glauber, 2007; Glauber and Smith, 2012). The first (catastrophic) insurance layer is fully subsidized. Beyond that, the taxpayer subsidizes roughly 60 percent of the premia across all of the multiple crop insurance options available to producers. It also covers the cost of managing the program by reimbursing private companies for their administration costs as explained in section 2.1.3, and covers reinsurance costs. This results in large subsidies to a system with poor actuarial performance.

Table 2 shows that, over the last six years farmers received on average \$5.5 billion in indemnity payments per year and paid on average \$3 billion in insurance premia so they experienced an average of \$2.5 billion in protection against risk from these programs. However, the government's premium subsidies and payments to insurance companies totalled on average some \$5.6 billion. So taxpayers paid close to \$2 for every dollar of protection given to producers (Babcock 2012b). The annual loss ratios for the federal crop insurance program also show the poor actuarial performance of the program (Smith et al 2012a). Zulauf and Orden (2012) also conclude that the coverage rate is artificially driven by public subsidies, and even farmers who could easily cope with a bad year are encouraged to go for high coverage. Taxpayers subsidize a lower percentage of the premium for the highest coverage rates, but in absolute value the cost to taxpayers goes up as the coverage level increases.

The design of the program is itself inflationary. A peculiarity is that price guarantee levels are established prior to the planting season. When crop prices increase substantially and farm incomes rise commensurately, crop insurance subsidies paid to farmers also increase substantially. This issue was stressed, in particular by the Government Accounting Office in a report that was very critical on the insurance system (GAO 2010). In addition to the limited income transfer efficiency of these programs, an eviction effect of private insurance exists for many agricultural risks (Goodwin, 2001; Babcock, 2006; Sumner and Gardner, 2007). Zulauf and Orden (2012) point out that the share of premia paid by farms declined from 74 percent in the early 1990s to 38 percent in the 2010 and 2011 crop years.

Federal crop insurance policies are sold and serviced by 16 private insurance companies. Because there is little competition between brokers at the local level, and because of the structure of the industry, various estimates show that they earn excess profits from the high premia they charge (Smith et al, 2012; Babcock, 2012b).²⁶ The reimbursing of private crop insurance companies for their "administrative and operating" costs at between 22 and 24 percent of total premia seems high.

Taxpayers are liable for a significant share of the payments that go to producers in the event of a yield or revenue loss. Overall, Babcock (2012a, 2012b) estimates that from 2001 through 2011, crop insurance companies enjoyed a total of \$11.77 billion in net underwriting gains from selling taxpayer-subsidized insurance policies. The rents in place in the system also generate considerable lobbying for maintaining a complex, non transparent system with many barriers to entry (Dismukes and Glauber, 2005; Edwards, 2009). The public system of reinsurance is such that private companies that provide contracts to farmers risk very little. This is likely to result in a considerable bill for the taxpayer in 2012 (Box 4).

The distribution of the benefits of the crop insurance policy is also an issue. Four crops - corn, cotton, soybeans, and wheat - account for over two-thirds of the acres insured, crop insurance payouts tend to go to counties that produce a lot of those four crops. A report by the GAO found that one farm business that had insured its cotton, tomatoes and wheat across two counties received \$1.8 million in premium subsidies in 2010, while the average farmer received only \$5,339. Additionally, the insurance company had received \$309,000 to administer the policies for this one large farm business alone (GAO, 2012).

Insurance payments have also raised environmental criticisms. Sumner and Zulauf (2012) draw attention to the way federal subsidies of insurance lead farmers to increase production and input use, plant crops in more risky areas, and create incentives for diversifying less, hence accruing the use of pesticides and other precautionary inputs. They find that subsidized crop insurance provides incentives to bring or retain in cultivation some land that is less productive, more vulnerable to erosion and more likely to include wetlands and high environmental value habitats.

Overall, the insurance programs are often considered as one of the most inefficient of all US farm programs as far as transfers to producers is concerned. In 2007, the Chairman of the House Oversight and Government Reform Committee, Henry Waxman called USDA insurance *"a textbook example of waste, fraud, and abuse in federal spending"*. The

²⁶ In 2011, the USDA's RMA attempted to limit the rents enjoyed by insurance companies by limiting management payments to \$1.3 billion a year. Babcock (2012) estimates that even with this cap in place the profits are still particularly large for insurance companies, given that agent commissions are far above what a competitive market would pay. Taking the cost of direct administration by USDA for catastrophic (CAT) policies, as a benchmark, he finds that private management of the crop insurance costs one third more.

inefficiency of the system is so high that Babcock (2012a) calculates that taxpayers would be better off if the insurance were simply given away to farmers. Giving all corn, soybean, wheat, cotton and rice farmers a 70 percent yield insurance policy on all their planted acreage could save taxpayers almost \$6 billion over 10 years according to his calculations. Still, the insurance program is likely to be expanded in the future, if we consider the propositions of both the House and the Senate for the 2012 Farm Bill (see section 3.5.2).

Assessment of disaster assistance programs. The definition of "disaster" used for triggering payments is loose. As Watts and Bekkerman (2011) explain, if any county suffers a 30 percent drop in production for any one crop, even if that crop is rarely grown, then all farmers in that county are eligible for disaster aid for all the crops they grow if the value of any of their crops is only 10 percent lower than their selected crop insurance coverage level. This allows payments even in situations that are rather standard for a naturally risky activity such as agriculture. In addition, farmers who do not suffer from disasters themselves are eligible for disaster aid, since if one county is declared a "disaster area", then farmers in all adjacent counties are also eligible for disaster aid. Watts and Bekkerman show that farmers in virtually every county in the US were eligible for disaster aid from the SURE program for any crop they grew in either 2008 or 2009, even though there is no evidence of "natural disaster" in those two years.

For the SURE program, the Livestock Forage Disaster Program, the Tree Assistance Program, and the Emergency Assistance Program, producers must obtain a crop insurance policy for each insurable commodity (the Non Insured Crop disaster assistance program covers other, non insurable commodities produced on the farm). In practice, programs like SURE act as an add-on to existing federal crop insurance programs. Sumner and Zulauf (2012) and Babcock (2012a, 2012b) also show that the linkage between disaster payments and insurance indemnity payments increases moral hazard. Babcock and Henessy (1996) and Watts and Bekkerman (2012) show that this leads farmers to adjust their production practices so as to incur indemnifiable losses more frequently and to increase the size of indemnity payments. There is also evidence that on-going, repeated payments for chronic "disasters" are encouraging farmers to change the way they manage their land— taking marginal lands out of sustainable uses and conservation (such as the CRP) or grass-based production systems and bringing them into intensive crop production (EDF 2008). There is also some redundancy with the ACRE program which is also based on revenue. The linkage between ACRE and SURE is not only that they complement each other, but that the SURE payments depend on the ACRE payments, as well as other payments such as countercyclical payments and marketing loans, making it more distorting than one may believe.

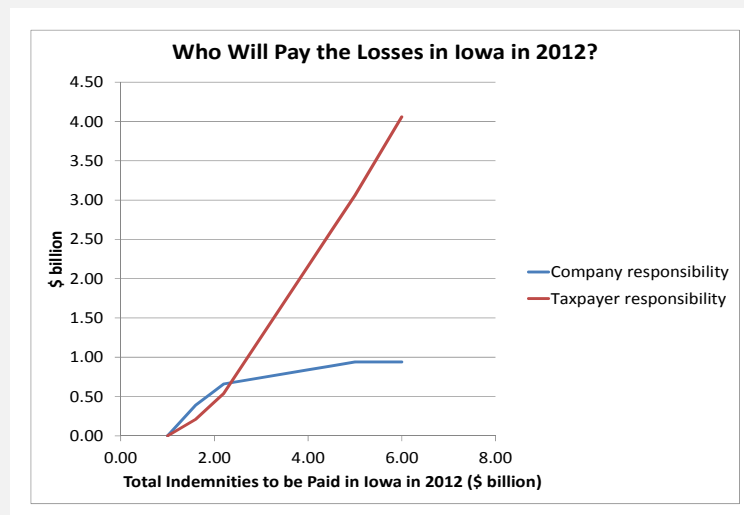
Box 4. Who will pick up the cost of the 2012 drought?

With the 2012 drought, yields will decrease significantly in many areas. The production of soybeans and corn are likely to be impacted significantly. However, the ERS USDA forecasts an increase in price that, for many producers of corn and soybeans, would more than offset the decline in yield resulting from the drought (even though one must consider the case of farmers who sold their harvest in advance at a low price). As this note is being written (September 2012), the USDA's ERS reported that 2012 net farm income will be up 3.7% compared to 2011. Zulauf (2012a) also finds that the higher price resulting from the drought has more compensated for the decline in yields for corn and soybean on average (some farms have much larger yield losses).

At the same time, insurance payments should go up. At this point the net indemnities (i.e. indemnities paid to farmers minus premium paid) are unknown, even though an estimate of \$18 billion of underwriting losses circulates (Financial Times, August 26 2012; note that some experts find this figure excessive: it would mean that indemnities would approach \$30 billion which they consider as unlikely). Out of this, a considerable share could be paid by the taxpayers. Should the net indemnities indeed reach \$18 billion, perhaps up to \$14 billion could be funded by the taxpayer (author's crude estimation, based on the extrapolation of calculations made by B. Babcock for Iowa and Texas, see figure below). Indeed, in the case of large indemnities, the reinsurance system is generous for private companies that have contracted with farmers. For losses that slightly exceed the premium, the government share is roughly 35 percent of the cost. This percentage reaches 90% for the losses between 2.2 and 5 times the premium, and 100% above. In addition to the funding of net indemnities by taxpayers, it is noteworthy that the premia are also subsidized (In 2012 the premia amounted to \$11 billion, only \$4 billion being paid by farmers, the rest being paid by taxpayers according to USDA figures). This adds to the subsidies paid to insurance companies to cover administration and operating expenses.

While many farmers are likely to experience a fall in income, some may gain significantly from the insurance payments. In particular those farmers who bought a "harvest price option" on insurance, and whose yield losses will be more than offset by the rise in price, will get large revenue insurance payments on top of higher market revenue. Zulauf (2012a, 2012b) estimates that for well covered farmers who have experienced a yield loss lower than 25 percent, actual revenue will be higher than the one expected at planting.

A key issue is that, with the current insurance program, the cost for the taxpayer can vary considerably from one year to another. Perhaps from \$7 to more than \$20 billion, if we count the premium subsidies, the subsidies to private companies for operating the programs and the share of payments covered by the taxpayer in case of high losses.



Source: Figure drafted, as courtesy, by B. Babcock on the cost for taxpayers in the State of Iowa under various assumptions on indemnities paid, for a clarification purpose to a request from the author.

Note: The author thanks B. Babcock, V. Smith and C. Zulauf for responding to questions on the issues addressed in this Box but remains sole responsible of possible erroneous statements and calculations.

2.5.6. Distribution issues with the US farm policy

Addressing rural poverty has remained a stated objective of agricultural support in the United States since the Depression era programs. However, USDA data show that rural poverty is concentrated among part time farmers with unstable employment opportunities and low wages (Sumner 2007). As it is the case in the EU, rural poverty thus hardly provides a convincing justification for the vast majority of the farm payments that benefit rather well-off farm households. More than 800,000 farmers and landowners receive subsidies, but the payments are heavily tilted toward the largest producers (see EP, 2008). Some degree of capping has been introduced to individual farm payments but, these ceilings have either been quite lenient and circumvented. In practice, there are now two main ceilings. A person is ineligible for direct payments if the individual's 3-year average farm income exceeds \$750 000; furthermore a person is ineligible for all crop subsidy and disaster payments if the individual's average non-farm income exceeds \$500 000. The ceilings may be doubled effectively by allocating income to two spouses. Higher ceilings apply to the special case of conservation program payments. The capping is therefore seldom binding, even though it may avoid very large payments to absentee landowners.

The benefits of the US farm programs are also very unevenly distributed among the types of producers. This is particularly the case of the large scale countercyclical and safety net payments that are supposed to address income fluctuations. In practice, large farm subsidies are offered to deal with variable incomes for only a handful of program crops. A large share of US agriculture, primarily the meat and horticultural industries, receives little support. According to the ERS-USDA figures, more than 90 percent of agriculture subsidies go to farmers of five crops—wheat, corn, soybeans, rice, and cotton.²⁷

The US Farm Bill has uneven benefits between regions. The farm support programs benefit mostly the Corn Belt, the Great Plains, the Mississippi Delta, and Central Valley of California. On the other hand, the nutrition program benefits accrue considerably to urban areas which include a large poor population.

2.5.7. US farm programs and the environment

The Farm Bill includes some large scale conservation programs. However, their impact is often offset by US subsidies, insurance and disaster payments that tend to boost output and draw marginal farmland into active production, even though this land has high environmental value. Other programs that rely on price support and trade barriers like sugar induce production on land that might be left to a more natural use, including some wetlands that used to play a considerable role in the circulation of water (e.g. Florida's Everglades).²⁸ Areas that might otherwise be used for parks or forests are also locked into agricultural production because farm subsidy payments get capitalized into higher prices for land (Goodwin et al 2012).

Many US agricultural programs, including shallow loss payments, insurance and disaster payments, also indirectly encourage higher use of fertilizers and pesticides through different channels. The development of "dead zones", i.e. large ocean areas that become sterile due to eutrophication, largely a consequence of agricultural nutrients run-offs, can be linked to the US farm policy (even though high market prices are also a cause). The dead zone surrounding the outfall of the Mississippi River is particularly gigantic (it is

²⁷ See www.ers.usda.gov/briefing/farmincome/govtpaybyfarmtype.htm for details (accessed August 2012)

²⁸ Florida has attempted to buy out sugar producers for both environmental and cost efficiency objectives, with some mixed success.

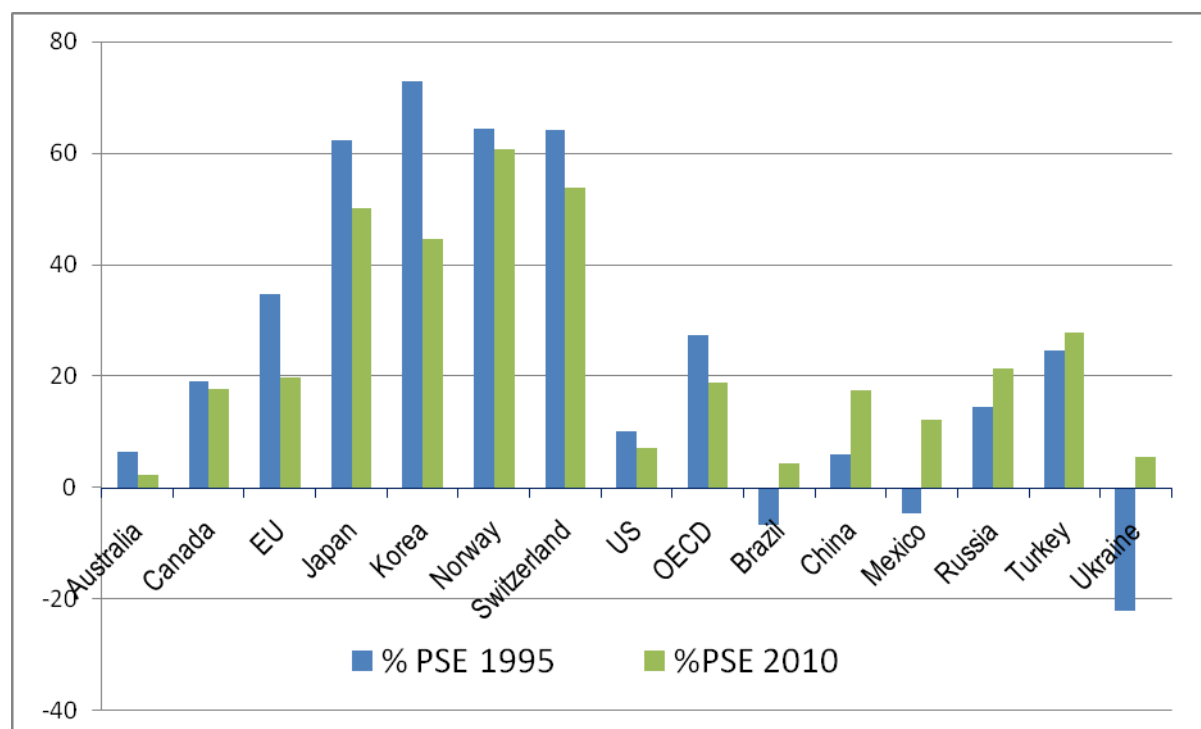
estimated to cover 18000 square kilometres in 2012) and it is still expanding. Other "dead zones" also affect the Pacific Northwest regions, and areas close to major rivers on the Eastern Coast.

Farm programs for crops such as cotton also encourage the use of water which has become increasingly scarce in many US regions, due to the combination of urban and agricultural pressure. Federal subsidies, including specific programs for irrigation, also play a role in the depletion of aquifers (for example, the Bureau of Reclamation sells water to farmers at a fraction of the market cost). The resulting overuse of water has long dried up the Colorado River in its lower section. There are concerns for the large aquifers of in the Southwest and High Plains (which includes the threatened Ogallala aquifer) and the Sparta aquifer in the Mississippi area.

2.6. US farm support and distortions on world markets

The US farm support affects world markets through various channels. First, the US has maintained a large system of coupled subsidies, even though their budgetary costs have been low over the recent years due to short term market conditions. Second, some of the farm support (dairy, sugar) is conditioned on border measures that impact trade in a direct way. Third, the system of export credits and international food aid still acts as export subsidies, even though their impact has decreased over time. Finally, the US biofuel program is a source of considerable externalities in world markets, even though its effects tend to oppose the effect of traditional farm support programs as far as world prices are concerned.

Transfers to producers. The US level of farm support remains much lower than the one in the EU. If one measures farm support using the Producer Support Estimate (PSE) calculated by the OECD, the US appears as one of the countries that provides a limited amount of support relative to the value of production (Figure 3; see EP, 2012 for an extensive review of the indicators and the comparison of EU and US farm support). The PSE measures the transfers to individual producers. It includes all forms of transfers, i.e. not only the production enhancing one, but also, for example, decoupled payments and environmental payments. A more global measure is the OECD Total Support Estimate, which also includes transfers to the farm sector as a whole. Because the OECD includes the nutrition budget in the TSE, the US support appears larger than in many countries, i.e. 37 percent of total farm receipts against 23 percent in the case of the EU. The extent to which the US nutrition (food stamps) programs contribute to support farm income and agricultural production is not well established, even though there is no doubt that a program of this size has an impact on producers (see EP, 2012 for more details).

Figure 3. Producer Support Estimates, comparison of US with third countries

Source: JP. Butault (INRA) and author, using OECD data. Estimates for 2010 are still preliminary.

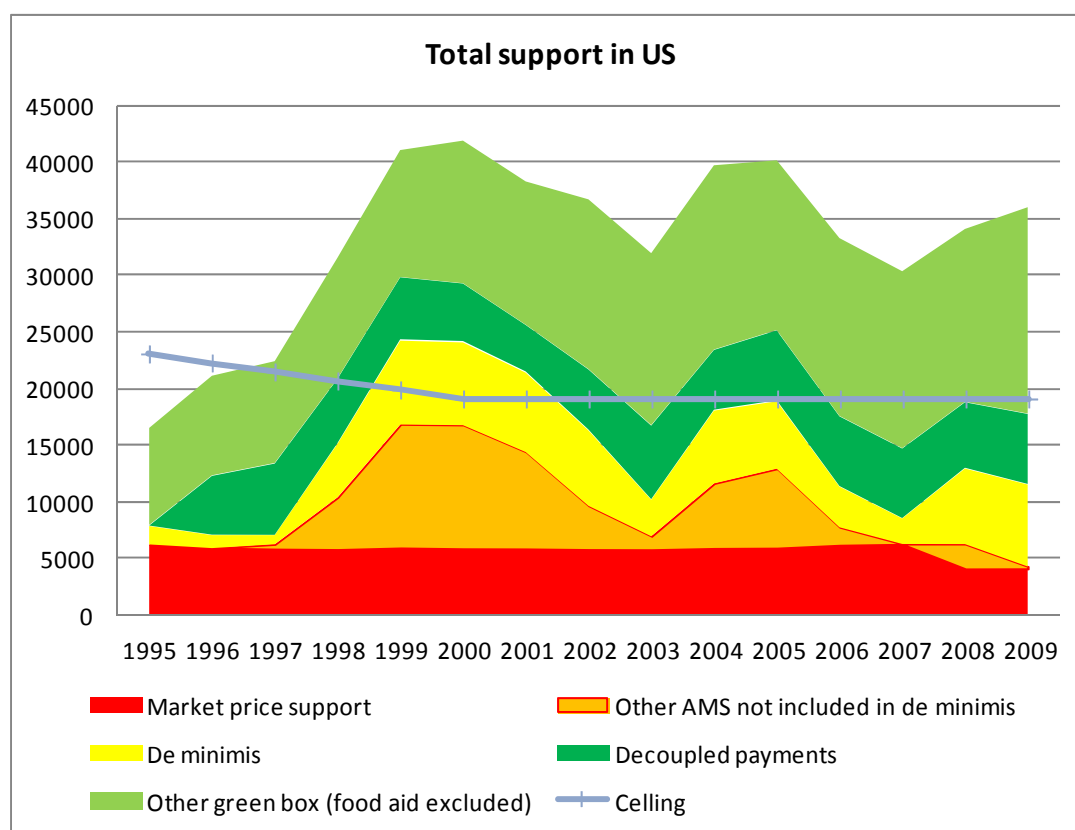
Distorting support. The WTO measures the support that affects most markets and third countries through the Aggregate Measurement of Support (AMS). It includes support through prices (which provide a direct incentive to produce more) and a variety of payments that are coupled to production and inputs. This support is often called "Amber Box" support to contrast with payments that have no or minimal impact on production, that are often referred to as "Green Box" support. Each WTO member faces a ceiling for such types of support in the 1994 Agreement on Agriculture. The US ceiling for AMS is currently US\$19 billion. It will most likely go down in the case of an agreement in the Doha round of negotiations.

Large scale expenditures such as the nutrition budget and the conservation budget in the Farm Bill do not inflate the AMS since these payments are considered to be "Green Box" eligible. Nor do the decoupled "direct payments" (even though some countries have challenged the decoupling of such payments). In the calculation of the AMS, it is possible to deduct some "*de minimis*" support if it represents less than a certain fraction of the value of production. This procedure has been extensively used by the US. Indeed, the US would have exceeded its AMS ceiling in 1999 and 2001 if it had not exempted large amounts of support as *de minimis* (see EP, 2008 and EP, 2012). The US Amber Box was also close to the AMS ceiling in 2005 (Figure 4).

Indicators such as the OECD PSE or the WTO AMS measure support that, in the US, is largely a function of market conditions. Over the recent period, US support appears low, but the instruments have not been dismantled and it could easily reach higher levels, should world prices go down. Because of the countercyclical nature of these payments, Gohin (2006) concluded that the impact of the US schemes on world markets was larger, and that the US instruments were more distorting than the EU ones. EP (2012) and Diakosavvas (2011) suggest that there has been some reduction in these distortions over

the recent period. However, unlike the EU, the US has shown little sign of turning towards flatter, lump sum payments to farmers since 2002.

Figure 4. Distorting support and maximum WTO ceiling, US, 1995-2009



Source: Author's calculation using USDA-ERS and WTO data.

Border measures. In the US, border protection is used to maintain structurally higher domestic prices than international prices for particular commodities, in particular dairy and sugar. The US uses a combination of tariffs and tariff rate quotas (TRQs).²⁹ The US schedule includes specific and *ad valorem* tariffs. As in the EU, the system of compound tariffs often lacks transparency (Bureau and Salvatici, 2004). The level of consolidated tariffs under the Most Favourite Nation (MFN) clause acts as a ceiling for applied tariffs in the EU, which applies MFN tariffs even to non WTO member countries. The US applies higher than MFN tariffs to particular non-WTO member countries and, to Cuba, a WTO Member. The US applies lower tariffs under preferential agreements, in particular the Generalized System of preferences, non reciprocal preferences for Least Developed Countries, and many bilateral and regional agreements. The US MFN tariffs are on average lower than the EU ones. In the US, the high tariffs are concentrated in a few sectors, such as dairy and sugar, while they are more widespread in the EU (see EP, 2008 for a comparison of EU and US tariff schedule).

²⁹ The US officially has 54 TRQs notified in their schedule of commitments to the WTO, but the figures are not particularly meaningful since some TRQs can include a wide range of products while others can be restricted to a few very particular tariff lines (the EU has 87 TRQs).

3. THE CURRENT STATE OF THE 2012 US FARM BILL

KEY FINDINGS

- The US Senate adopted its own version of a Farm Bill in June 2012. The Agricultural Committee of the House did the same in July 2012, but the House remains divided and has not yet adopted its version as we write (September 2012). Finding agreement within the House and between the two Chambers may prove difficult.
- The proposals tabled target the nutrition program (food stamps) and the conservation programs for cuts. They will end the fixed (decoupled) direct payments, but are likely to expand the insurance program and the "shallow loss" payments that protect farmers from drops in income.
- The combination of the insurance and income protection payments in the proposals tabled does not significantly reduce the costs of the farm programs. The assumptions that are used in assessing the costs of these programs tend to minimize the amount of payments that could take place in particular years. Overall, the expected savings with the proposed reforms of the farm support programs could be illusory.
- While Congress claims that its proposals will end "direct payments", it is the fixed, decoupled, direct payments that will be eliminated, not the many layers of direct payments that depend on market conditions. Overall the system might be more distorting for world markets, given the prospect of higher insurance and shallow loss payments.
- With the 2012 drought, the US is likely to be close to its maximum Aggregate Measurement of Support in the WTO. The proposed reforms by the Senate and the House Committee are likely to result in higher AMS, at least for years of low prices. The provisions proposed by Congress are unlikely to solve the ongoing WTO disputes.

3.1. Where do we stand?

As this note is being written (September 2012), two proposals for the 2012 Farm Bill have been passed, the first one by the Senate, the second one by the Committee for Agriculture (only) of the House of Representatives. The Senate version was passed on June 21 2012. While the Senate is controlled by Democrats by a tiny majority, it passed with bipartisan support, 64 to 35.³⁰ The Agriculture Committee of the House adopted its version of the Bill in July 2012.³¹ The House, however, has not met and has not adopted the Committee's bill as we write.

In the ongoing presidential campaign, Democrats are accusing the Republican leaders of the House of ignoring the conditions faced by farmers in times of a serious drought that is

³⁰ The Senate Agriculture Committee approved its version of the 2012 omnibus Farm Bill on April 26, 2012 (Agriculture Reform, Food and Jobs Act of 2012), and officially filed the measure S.3240 on May 24, 2012. After the bill was filed, more than 300 amendments were proposed for consideration on the Senate floor. 45 were adopted between June 19 and June 21. The full Senate approved S. 3240, as amended, by a vote of 64-35 on June 21. See Chite (2012b) for details.

³¹ The House Agriculture Committee completed markup of its version of the Farm Bill (H.R. 6083, the Federal Agriculture Reform and Risk Management Act of 2012) on July 11, 2012, and approved the amended measure by a 35-11 vote. Nearly 100 amendments were offered for committee consideration, of which nearly half were adopted by the committee (Chite 2012b).

leading to poor harvests and a high price of feedstocks for livestock producers. Facing considerable pressure from the public, the House passed a limited Drought-relief Bill and accused the Senate of not moving to adopt it. The \$383 million emergency relief package would focus on livestock producers affected by the drought. This Drought-relief bill proposal would be funded by cuts to the conservation programs (CSP and EQIP).

At this point, what come out of this procedure is largely unknown. The debate on the Farm Bill is, in theory, still open. Some of the proposals that have been made by different nongovernmental organizations could eventually be included (e.g. the Stacked Income Protection Plan or STAX drafted by the National Cotton Council seems endorsed by both the House and the Senate). The status of several proposals for "shallow loss" programs is still undecided. Shields and Schnepf (2012) have summarized the different proposals tabled for the safety net section of the Farm Bill (reproduced in Annex 2). The main uncertainty comes from the budget issue. It is difficult to reconcile the cost of the House Committee proposal with attempts by the same House to cut the federal budget. As a result, the broader issue of deficit reduction could be the major driver of the final Farm Bill.

3.2. The main orientations of the future Farm Bill

The main points of the debate. The main items in the current debate are the overall budget, and the possibility to cut the nutrition program budget, which represents 78 percent of the costs in the CBO baseline, given the current needs of the poorest households in times of economic crises. Behind these issues lie several debates. One is the opposition between a fringe of fiscal conservatives and those who support the macroeconomic policies that have been in place for the last four years. The other debate is on the federal budget returns to urban vs. rural areas, in which the food stamps program plays a large role. The underlying debate is complex, and reflects ideological positions regarding the role of the State, as well as some geographical and even perhaps racial divisions. A third debate is between those who think that erosion, water depletion and the loss of biodiversity require an ambitious conservation program and those who stress the importance of responding to world food demand.

Within Congress, some want to pursue the current programs in terms of farm commodity support, with a stronger safety net. Many others want to strengthen risk management tools such as crop insurance. Other issues include equitability concerns across the farm sector. Some members of Congress call for enhanced support for small and medium-sized farms. The equitability concerns also affect the debate on support to program crops vs. support to the livestock sector and specialty crops. Behind these debates also lies the issue of the spatial distribution of the federal budget.

The main orientations. As we write (September 2012), the debate within Congress suggests the "2012 Farm Bill" (which may be passed in 2013) could include the following provisions. First, nutrition programs would bear large cuts. In the House agriculture committee version, the food stamps program would be cut more than in the Senate Bill. Second, it is most likely that the "direct" (i.e. the decoupled) payments will be eliminated. Both proposals include their suppression. One major reason is that these payments appear in the CBO baseline, while other forms of support that are linked to market conditions, account for very little of the costs. Third, in spite of all the criticisms regarding the excessive cost of delivering crop insurance, both chambers seem keen to expand the system.

There is still a debate within the House on whether the government should cover the "shallow losses" (i.e., losses not covered by federally subsidized crop insurance but absorbed by the producer via the policy deductible, see Box 5) caused by minor deviations from normal weather or modest market price changes. Many Senators echoing the farm lobby position argue that insurance deductibles leave producers with too much out-of-pocket cost. Other Members of Congress say that because such losses do not necessarily threaten the commercial viability of a business and are part of the cost of doing business, the government should focus only on "deep losses" that would drive a producer out of business and instead should allow producers to deal with a private insurance system. At this point it is unclear who will finally win the debate, but the proposals tabled suggest that rather ambitious shallow loss programs will complement the insurance program.

Third, it is largely publicized by the Senate and the House that the future bill will reduce assistance to farmers. However, this statement does not seem convincing. The cut to direct payments does reduce the overall farm support budget in the CBO baseline. But if there is a poor year or any price reduction, the strengthening of the "shallow loss" programs that are included in the proposals could lead to much higher expenditures.

Fourth, even though the Senate and the House Committee proposals differ, countercyclical and production coupled forms of farm support will most likely be expanded in the next Farm Bill. The Senate Bill is particularly ambitious in this area, with revenue targets that adjust with market prices, countercyclical payments that are increasingly coupled to current production through higher target prices, and updated yields and base acreages. If under the next Farm Bill, payments are made on planted acres instead of historical base acres this would involve some "recoupling", since benefits would be more closely tied to producer loss. This will create the potential for market-distorting behaviour by encouraging producers to plant for the program rather than the market, which could lead to overproduction, lower crop prices, and higher federal outlays (Schields and Schnepf, 2012). It might also lead to larger payments under the WTO "Amber Box" (see section 3.6).

Overall, the cuts will target mostly the nutrition program (to an extent that is largely unknown since there is stark disagreement between Republicans and Democrats on this issue), the "direct payments" and the conservation budgets. A paradox is that the measures that will be cut are part of the "green box" measures, which are the ones that generate the smallest international distortions.

Box 5. What are the "shallow loss programs" proposed by Congress?

A variety of proposals have been made by the various stakeholders and the Senate regarding different versions of "shallow loss" programs (Shields and Schnepf, 2012). These programs rely on the idea that farmers' incomes need to be guaranteed when there are price drops or poor harvests. As a general principle the shallow loss programs proposed are rather similar to ACRE. The idea is to calculate an average revenue per hectare for a crop, possibly over a moving five year period of yields and prices and then establish a revenue guarantee per acre (in the Senate version, the guarantee would be 89 percent of the estimated average revenue). A payment would be made when the current year revenue, (multiplying yields at a local level and prices at the national level) fall below the revenue guarantee, covering the difference. The per acre payment would be made in proportion to the acres planted to the crop (65% or 75% in the Senate Bill). In the proposals listed by Shields and Schnepf (2012, see Annex 2) the program would be based on either State level yields (as in the current ACRE program), on crop reporting district yields, on county yields or even on individual farm yields (as it was the case in one option of the Senate proposal for the Bill).

3.3. The House Committee for Agriculture and the Senate proposals

In this section, we compare the Senate version of the Farm Bill (S 4340 bill) and the Committee for Agriculture of the House of Representatives proposal (HR 6083 bill). We rely mostly on the detailed comparison which is provided by a team from the Congressional Research Service (Chite, 2012b) and on the Food and Agricultural Policy Research Institute simulations (FAPRI, 2012).

The CBO issues a baseline budget for all federal spending under current law over a multi-year period.³² Projected spending in the baseline represents CBO's estimate at a particular point in time of what federal spending and revenues likely would be under current law if no policy changes were made over the projected period. The baseline serves as a benchmark or starting point for future budget analyses. Whenever new legislation such as a Farm Bill is introduced that affects federal mandatory spending, its impact is measured as a difference from the baseline.

3.3.1. The cost of the proposed Farm Bills

According to the CBO March 2012 baseline, the current policies would cost some \$993 billion over the next 10 years, should the FCEA be continued (the CBO takes into account programs that are due to expire). Compared to the CBO baseline, there are significant cost differences between the proposals that have been tabled. For example, in its own recommendations for changes, the US Administration envisages some \$33 billion of budget cuts in the whole Farm Bill over 10 years. The Senate version of the Farm Bill would save some \$23.6 billion and the House Committee some \$35.1 billion over the same period. It is noteworthy that the House budget resolution would have cut Farm Bill spending by \$180 billion, which shows the difficulty within the House to reconcile the proposals of the different committees.

³² Congressional budget rules require that legislation be scored over a 10-year time horizon even when legislation, as with a Farm Bill, covers a shorter time period.

The Senate version. According to the CBO analysis of the Senate version of the Farm Bill (Bill S.3240), the Senate proposal would reduce mandatory farm bill spending by \$23.6 billion over the 10-year period FY2013-2022, thanks in particular to cuts of \$6 billion and \$4 billion in the conservation and nutrition programs, respectively. To be consistent with the Super Committee budget proposal, the Senate also proposes to save \$19.8 billion in the commodity programs, but the Senate proposal regarding the crop insurance program would offset some of these cuts (the CBO estimates the extra costs to be +\$5.1 billion) as would the Senate proposals on other titles such as research, horticulture, energy and forestry (+1.4 billion, combined). Overall, the Senate Bill would reduce the total 10-year outlays by 2.4% from \$993 billion to \$969 billion over the FY2013-2022 period (Monke, 2012a). In Annex 3 we reproduce a figure from the Congressional Research Service which is particularly illustrative and shows the relative changes induced by the Senate proposal compared to the CBO baseline.

The House Committee version. The version of the Bill passed by the House Agriculture Committee (H.R. 6083) would reduce the 10 year budget by \$35.1 billion, i.e. -3.5% compared to the CBO baseline. Even though we are talking about very small percentages in both cases, the House Committee version is therefore more ambitious in its cuts. The cuts are larger than in the Senate version for the nutrition Title. One reason why the House has not endorsed the proposal is that some of the House Democrats resist the \$16 billion in cuts over a decade to the food stamp nutrition program for low-income Americans. Cuts in the commodities programs would also be larger in the House Committee version, totalling \$23.6 billion over ten years versus \$19.4 billion in the Senate version. In Annex 4 we reproduce a figure by the US Congressional Research Service that provides a comparison between the two proposals.

3.3.2. Are the CBO budget estimates realistic?

The baseline and the costs of farm programs. The CBO baseline is central to the Farm Bill design. The procedure is such that Congress focuses on deviations from the baseline when examining the various proposals. This raises several issues.

First, it is noteworthy that what serves as a basis for discussion does not cover some particular programs whose funding is outside the current Farm Bill procedure. As we saw in section 2.4 many of the US farm policy components appear with a zero budget in the CBO baseline.

The CBO baseline reflects mandatory outlays that do not require appropriations action. It also assumes that the agriculture programs authorized by the FCEA continue to operate beyond their statutory expiration dates through 2022 even though the FCEA established authorizations through 2012 for most such programs (CBO, 2012).³³ Programs that do not receive mandatory funding are not counted in the baseline, but because the Bill is required to comply with PAYGO rules, increased spending in one area must identify spending reductions and/or revenue enhancements in other areas such that the overall effect of the bill should be budget neutral. The CBO baseline does not include the many Farm Bill programs whose mandatory spending expires in 2012. This includes thirty-seven provisions of the FCEA which received mandatory budget authority (Monke, 2010; Chite 2012a). In many cases, it seems difficult to end discretionary or expiring mandatory programs even

³³ Many of the existing programs expired at the end of FY2012 (September 30, 2012). This date is also when annual appropriations expired. However, remember most aspects of the food stamps program and the emergency assistance programmes would continue to operate if funds were appropriated to the SNAP account as explained in section 1.2.1.

though they are not part of the baseline. Funding for these programs with expiring baselines needs to be found by savings created elsewhere in Bill.

Does the CBO baseline give a reliable image of the costs of the US farm programs?

The CBO baseline relies on the assumption that the FCEA would remain in effect for the projected period. To estimate these baseline costs, CBO analysts use projections of supply, demand, and prices of selected agricultural commodities that would affect commodity program spending. They also use projections of macroeconomic conditions that will affect food and nutrition assistance program spending. As a result, cost estimates are sensitive to baseline assumptions. As an example, the spending for the SNAP over the five-year period of the FCEA turned out to be much higher than originally projected in 2008, reflecting additional spending because of provisions in the American Recovery and Reinvestment Act, higher food costs, and increasing program participation rates due to the recession.

A major issue is that many (and an increasing share) of the farm programs face costs that are very dependent on market situations and yields. This is particularly the case of the CCP, marketing loans, insurance payments, and disaster payments. In the CBO projections of alternative policies, it is also the case for the "shallow loss" programs that would expand the ACRE type of public intervention, i.e. covering drops in farm income due to both prices and yields. Lower commodity prices would increase cost estimates for such programs. In practice, the CBO projections seem to rely on optimistic assumptions regarding the price of "commodity crops" that are so important in the US policies, i.e., wheat, soybeans, cotton and rice. This is a risky bet, given the historically high prices in world markets and the very high current level of oil prices, which drives up the ethanol market and hence the price of sugar, oilseeds and corn.

Because in the CBO baseline the only farm programs that appear to generate high budget costs are the (fixed) direct payments and the conservation payments, which is somewhat artificial since it relies on the bet that current high prices will be maintained over ten years, attention is drawn to these programs. At the same time, some other programs (e.g. insurance, ACRE, SURE) could turn out being fiscal bombs under alternative conditions.

The valuation of the proposals by Congress as a deviation from the CBO baseline relies on a mean value, but the way the CBO exercise is designed results in major upside risk and no downside risk. The CBO estimate is that the shallow loss program in the Senate version of the Bill would cost between \$1.7 and \$2.8 billion a year, depending on the options retained. However, under less optimistic scenarios, e.g. if corn, wheat, soybean, rice, and cotton prices return to the average levels observed between 1996 and 2011, Smith et al (2012a) show that the same program would cost between \$5 billion and \$7.5 billion. Other proposals based on county level yield references could cost taxpayers between \$8.4 and \$14 billion, depending on the rate of reimbursement. Smith et al (2012a) consider that the shallow loss programs proposed by the Senate would be more expensive than the current direct payments program.

3.4. Proposed changes in nutrition and rural development programs

In spite of the good agricultural market conditions over the past years, the need to cut the budget deficit and the rhetoric of the conservatives regarding the excessive role of the State in the economy, there is surprisingly little pressure for deep cuts in the large programmes that benefit farmers. Many of the proposed cuts are focused on nutrition, on

the limited programme of "direct payments" and on conservation programmes. At the same time, more ambitious insurance programmes are proposed.

3.4.1. Nutrition

The cuts in the nutrition budgets are different between the two proposals. The Senate version of the Bill cuts about \$23 billion in spending, with \$4.5 billion in savings coming from food stamps (SNAP). The House Committee for Agriculture would reduce food and nutrition spending by more than \$35 billion over 5 years, with cuts in the SNAP budget of \$16.5 billion. It is worth noting that in other House Committees, the food stamps program is even more steeply targeted, in particular by the most fiscally conservative Republicans. For example, the House Republican budget introduced by Representative Paul Ryan (Republican, Wisconsin), a candidate for vice presidency, would reduce food stamp spending by about \$134 billion over the next decade and turn the program into block grants for the states.

In spite of the proposed cuts, both the House Committee and the Senate proposals maintain considerable budget for the nutrition program under Title IV of the Farm Bill. Under the Senate proposal, the budget for nutrition would still be \$768 billion for 10 years against \$772 billion in the baseline. The CBO estimates total 10-year budget savings of \$4.0 billion in the Senate bill and \$16.1 billion in the House Bill.

Regarding the actual content of the proposals, both intend to target fraud and would restrict benefits for households that receive subsidized energy. The House Committee proposal also restricts categorical eligibility, repeals state performance bonuses, and addresses symbolic issues such as medical marijuana expenses. Both proposals limit eligibility for the Commodity Supplemental Food Program (CSFP) to low-income elderly participants, phasing out eligibility for low-income pregnant women and children (Chite 2012b). Both bills increase the funding of TEFAP by \$0.2 billion over 10 years and increase some minor programs by a few million dollars (e.g. for Puerto Rico, "farm to school" initiative). The Senate adds discretionary authority for a Healthy Food Financing Initiative, which is not included in the House Committee proposal.

3.4.2. Conservation

Conservation is particularly targeted by budget cuts in both the House Committee and Senate proposals. In both cases, some \$6 billion of cuts are forecasted over 10 years, which is large compared to the \$64 billion expenditure in the baseline. Budget cuts particularly target land retirement programs. It is also worth noting that it is often the Conservation program that is affected by PAYGO discipline, i.e. when Congress decides to increase discretionary spending on one item and needs to cut funding on other programs. Because of the need to pursue some programs that are ending during the next years and the budget stabilizers, conservation may suffer from unpredicted cuts.

Congress' proposals also intend to simplify the rather complex portfolio of conservation programs. Both proposals would merge the other conservation programs into two new programs—the Agricultural Conservation Easement Program and the Regional Conservation Partnership Program, which would delineate programs to protect and restore wetlands and to develop conservation at a watershed scale. Both the Senate and House Committee bills reduce the number of programs but the main ones, i.e. CRP, EQIP and CSP are maintained. The CRP is capped by a reduced acreage enrolment ceiling from 32 million acres to 25 million in both proposals. The Senate proposal cuts the budget of EQIP by more than 5

percent. The CSP is also reduced, this time with a designation of maximum enrolled acres, by roughly 20 percent in the Senate version and 30 percent in the House version.

The Senate proposal adds the federally funded portion of crop insurance premia to the list of program benefits that could be lost if a producer is found to produce an agricultural commodity on highly erodible land or converts a wetland to crop production (provisions known as sodsaver and swampbuster). That is, crop insurance premium subsidies would be reduced for production on native sod during the first four years of planting and these crops would also be ineligible for the Noninsured Crop Assistance Program (NAP) as well as general commodity support programs. Such conservation compliance has existed since the 1985 farm bill and currently affects most USDA farm program benefits, but has excluded crop insurance since 1996. The House committee proposal does not include similar provisions.

3.4.3. Rural development, credit and research

There is rather little change in the programs covered in the House Committee and Senate proposals. The electrification programs are maintained, with administrative simplification, and the Senate proposal consolidates various water and wastewater assistances programs. The programs for small enterprises mainly experience some consolidation and administrative changes. Both bills include some funding for the development of broadband telecommunications. Overall, the changes are mostly organisational, such as a new definition of what is a "rural area" and some consolidation of regional programs.

Neither the House nor the Senate bills make a large change to the USDA credit programs, which would still remain a lender of last resort.

Both proposals would also reauthorize funding for the USDA research programs at the federal level and for the federal support of extension and education in the states. There is a minor increase for research on specialty crops and organic products. In the House proposal, there is an increase of \$0.1 billion over ten years to establish the Foundation for Food and Agriculture Research, as a complement to USDA managed programs, so as to attract private money for collaborative grants.

3.4.4. Energy

The Senate proposal contains \$0.8 billion in mandatory funding and \$1.1 billion in authorized appropriations over 10 years. The House version contains \$1.3 billion of authorized appropriations (no mandatory funding), and reduces the USDA funds for the development of cellulosic ethanol. Both the Senate and the House proposals would extend most of the renewable energy provisions, with the exception of the Repowering Assistance Program, the Rural Energy Self-Sufficiency Initiative, and the Renewable Fertilizer Study, which are repealed by both proposals. The Senate version also repeals the Forest Biomass for Energy Program, while the House bill repeals the Biofuels Infrastructure Study.

3.5. Farm support in the Senate and House proposals

3.5.1. The main orientation of the Congress proposals

The marketing loans system is maintained in both the Senate and the House Committee proposals. Authority is continued to provide low-price protection at loan rates specified in current law or some adjustment (e.g. the cotton loan rate).

Under both the Senate and House Agriculture Committee proposals farm support for traditional program crops is restructured by eliminating the direct (decoupled) payments. Over 10 years this would correspond to \$50 billion in savings according to the CBO projections. The CCP and the ACRE programs are also formally eliminated but new instruments are developed that in effect replace them. Indeed, in both proposals, the corresponding subsidies would be replaced by a combination of crop insurance programs and new "shallow loss" programs. While it is expected that the corresponding costs would be lower than the savings from the elimination of the direct payments, this is perhaps a risky bet, given that the new programs would depend on market conditions and yields while the direct payments have had a fixed and predictable budget.

The Senate proposal would allow the CCP and the ACRE payments to expire after 2012, but they would be replaced by a new Agriculture Risk Coverage (ARC) program, detailed in section 3.5.4. The House Committee proposal is similar to the current mix of farm programs in that it retains producer choice between a countercyclical price program (renamed Price Loss Coverage or PLC) and a revenue program (renamed Revenue Loss Coverage or RLC) which are also detailed in section 3.5.4. In brief, for PLC, the price guarantees that determine payment levels are increased relative to parameters in the current program to better protect producers in a market downturn. For RLC, the guarantee is based on historical revenue at the county level, so losses are more likely to be covered than under the current ACRE, which calculates the guarantee at the state level. Compared to the Senate proposal of a single Agriculture Risk Coverage (ARC), the House proposals offer slightly less of a guarantee and no option to select coverage at either the county or individual farm level.

The Senate proposal replaces current government support programs for dairy producers (i.e. Dairy Product Price Support, Milk Income Loss Contract Payments, and Dairy Export Incentives Program) with a new Dairy Production Margin Protection Program and a Dairy Market Stabilization Program.³⁴ The House proposal for dairy policy is rather similar to the Senate version, i.e. replacing current programs with a new one that provides payments to participating dairy producers when the national margin (average farm price of milk minus average feed costs) falls below a certain threshold.

Under the House Committee proposal, a new price support program would cover peanut, cotton and rice producers through deep, multiple-year price declines. This corresponds to a political response to Southern rice and peanut growers' opposition to the elimination of decoupled payments (Nixon, 2012). The sugar program is left almost unchanged in both bills.

³⁴ Note that federal milk marketing orders have permanent statutory authority and would continue under both proposals.

3.5.2. Proposals for insurance programs

Both proposals contain several changes to the existing federal crop insurance program (this program is permanently authorized by the Federal Crop Insurance Act).

In the Senate bill, a Supplemental Coverage Option (SCO) would allow farmers to combine farm-level crop insurance coverage with crop insurance based on county-level coverage. This option would be subject to a deductible of 21 percent of expected revenue for farmers participating in the ARC or 10 percent of expected revenue for other farmers. USDA would pay 70 percent of the premium for the SCO policy. The Senate bill would also authorize USDA to develop and offer profit-margin insurance policies, which would cover the difference between farmers' receipts and costs of production. Farmers would be allowed to divide their cropland into separate units so that if one unit has a loss and the others do not, the loss is paid on the unit with a loss regardless of the production from other units. An increase in the reference yield that can be used to calculate the benefits in case of unusually low yields in the reference (production history) would also relax the conditions for payments. The proposal would also reduce fees for beginning farmers. Overall, the proposed provisions tend to bring more benefits for farmers than the current system

The House Committee version of the Bill also relies on a SCO. In the Senate proposals, the SCO can cover a higher percentage (21 percent) of a producer's deductible if the producer is enrolled in ARC. In the House Committee bill, the SCO can cover all but 10 percent of the deductible for a producer enrolled in PLC.

In both proposals, a new policy called Stacked Income Protection Plan (STAX) is made available for cotton producers. Producers could purchase this policy alone or in addition to their individual crop insurance policy and the indemnity from STAX would pay all or part of the deductible under the individual policy. STAX sets a revenue guarantee based on expected county revenue. Under STAX, upland cotton producers would be eligible to purchase a crop insurance policy for revenue losses of between 10 percent and 30 percent of the expected revenue from cotton crops in the county. The farmer subsidy as a share of the policy premium is set at 80% for STAX. In the Senate bill, SCO is available to producers not enrolled in STAX. In the House Committee proposal, SCO is not available for acreage enrolled in STAX (or RLC). CBO estimates that STAX would cost \$3.2 billion over the 2013-2022 period.

Provisions in both bills revise the value of crop insurance for all organic crops to reflect prices of organic (not conventional) crops and to expand coverage for specialty crops. Both proposals also include minor funding for research and studies on how to tailor the insurance programs. In the Senate version, insurance payments are subject to a greater environmental cross compliance, through the "sodsaver" provision that would reduce crop insurance subsidies and noninsured crop disaster assistance for the first four years of planting on native sod acreage (this provision is limited to particular states in the House version). In the Senate bill (only) crop insurance premium subsidies are available only if producers are in compliance with wetland conservation requirements and conservation requirements for highly erodible land. In the Senate proposal crop insurance premium subsidies would be reduced by 15 percentage points for producers with average adjusted gross income greater than \$750,000.

In the Senate proposal, several insurance programs would total an expected \$96.4 billion over 10 years, i.e. \$5.1 billion more than what is expected under continuation of the current programs (CBO, 2012). In the House Committee proposal, the insurance program

would add \$9.5 billion to the cost of the program, compared to the CBO baseline (Chite, 2012). However, these figures appear somewhat conservative. FAPRI (2012) reaches higher figures, assuming higher SCO participation rates. Because of the complex linkages between SCO proposals and the other shallow loss payments described in section 3.5.4, the estimates of the total costs of these programs are particularly sensitive to assumptions (FAPRI, 2012).

3.5.3. Proposals for disaster payments

The 2008 FCEA introduced five "permanent" disaster programs in order to limit the *ad-hoc* disaster payments that had become frequent (see section 2.1.3). The largest one is the SURE program which would not be reauthorized under either the Senate or the House Committee proposals. Both would nevertheless reauthorize the four other programs, which cover livestock and trees.

Instead of the SURE program, crop disaster assistance would be included in the ARC proposed by the Senate, by allowing producers to protect against farm-level revenue losses. The House Committee proposal does not seem to include specific provisions for crop disaster assistance in addition to the SCO, RLC and PLC programs.

There is some minor divergence between the two proposals regarding the limits that cap disaster payments and the means testing, with the Senate reducing the farm program payment limit to \$50,000 per person for ARC (the Senate would also add a \$75,000 limit on loan deficiency payments). The program payment limit under the House proposal is \$125,000. The Senate bill effectively requires personal labour in the farming operation to be eligible for payments.

It is difficult to assess the costs of the changes to the disaster payments. The five "permanent" disaster programs in the FCEA were authorized only for losses from disaster events that occurred on or before September 30, 2011, and not through the entire life of the 2008 farm bill (which generally ends on September 30, 2012). As a result, funding for these programs is not included in future baseline budget estimates. The CBO estimates that continuing the four programs as proposed by both the House and the Senate (i.e. the Livestock Indemnity Program; Livestock Forage Program; Emergency Assistance for Livestock; and Honey Bees, Farm-raised Fish, and Tree Assistance program) would cost almost \$1.9 billion more than the amounts in the CBO's baseline for the 2013-2022 period.

3.5.4. The ARC and the PLC/RLC proposals

"Shallow loss" programs have become an explicit part of policies on US farm commodity subsidies since 2008, in the lines of the ACRE and SURE programs (see EP, 2008). Both the Senate, with the ARC proposal, and the House Committee, with the PLC/RLC proposals borrow from these two programs.

The Agriculture Risk Coverage option or ARC. The Senate proposal would establish the ARC program for crop years 2013-17. Covered commodities are wheat, corn, grain sorghum, barley, oats, long grain rice, medium grain rice, pulse crops (dry peas, lentils, small chickpeas, and large chickpeas), soybeans, other oilseeds, and peanuts. Cotton is not covered under ARC but producers of upland cotton would be eligible for STAX.

Under ARC, producers would receive a payment from the federal government to compensate them for any difference between the revenue they receive from selling their

crop and the revenue the government expected the producer to receive using a calculation specified in the Bill. Application would be a one-time decision applicable to all acres under the operational control of the producers. The payments would be made when actual yield times national farm price drops below 89% of the benchmark revenue. The per-acre payment rate would equal the difference between the per-acre guarantee (89% times benchmark revenue) and actual revenue.

The proposed ARC offers the option for farmers to select coverage at either the county or individual farm level. A farmer could select either a farm option or county option. In the case of the farm level option, a 5-year farm yield times 5-year average national price (excluding the highest and lowest years) is used and the payment would equal the difference between the per-acre guarantee and actual per-acre revenue times 65% of eligible planted acres. In the county level option, the same "Olympic" average would apply to county yields. The payment would equal the difference between the per-acre guarantee and actual per-acre revenue times 80% of eligible planted acres.³⁵ Eligible program acres cannot exceed average total acres planted (or prevented from being planted) to covered commodities and upland cotton on the farm during 2009-2012. In combination with ARC, producers may purchase an additional insurance policy, the SCO described above (see Chite et al, 2012 for details).

CBO estimates that spending for the new ARC program would total \$28.5 billion over the 2013-2022 period, i.e. \$3.2 billion per year; however, actual payments from year to year would most likely vary considerably.

The PLC and RLC. The House Committee for Agriculture proposal would allow producers to choose between a counter-cyclical price program (renamed Price Loss Coverage or PLC) and a revenue program (renamed Revenue Loss Coverage or RLC). In this proposal PLC is eligible on commodities currently covered by the CCPs, except upland cotton, which is covered by STAX as in the Senate proposal. The payment rate is the difference between the reference price and the national midseason market price (or loan rate, if higher). The reference prices that determine payment levels are higher than those in the current CCP, making the program more easily triggered in a market downturn. The payments rates correspond to the payment rate times 85% of total acres planted to the crop, times 90% of 2008-2012 average yield per planted acre. Payment acres cannot exceed farm base acres.

While PLC can be seen as a way to maintain something like the current CCPs (which would be ended in the House Committee proposal), the RLC is rather similar to the ARC program in the Senate proposal. It is an alternative to PLC for crop years 2013-2017 for the same crops as those under ARC. Farmers make a one-time, irrevocable election on a commodity-by-commodity and farm-by-farm basis to receive RLC payment instead of PLC. There are nevertheless some differences with the Senate's ARC proposal. With the RLC, the guarantee is based on historical revenue at the county level while ARC leaves the choice of the farm level. The revenue loss trigger (guarantee) is based on 85% of historical revenue (compared with 89% in the Senate's ARC). Payment is made on 85% of planted acres and 30% of prevented planted acres (Chite, 2012b). The Supplemental Coverage Option (SCO) is not available in combination with RLC but may be purchased with PLC.

A good way to stabilize farm income? Like the ACRE program, the proposed shallow loss programs (the Senate's ARC and the House's combined RLC/PLC) trigger payments in

³⁵ Special minimum prices would be established in benchmark revenue calculations for rice and peanuts. Separate guarantees are to be calculated for irrigated and nonirrigated crops and differentiated by class of sunflower seeds, barley and wheat.

the case of revenue shortfalls estimated on a per acre basis. When prices are expected to decline from recent average levels, producers may expect ARC or RLC payments and are likely to plant more acres. According to the simulations by FAPRI (2012), PLC should have less impact on production if prices decline from current levels while remaining well above reference prices, but could have even larger impacts than ARC or RLC if producers expect market prices to drop significantly below reference price levels. In any case, replacing the predictable direct payments with such programs will undoubtedly encourage farmers to produce more, and probably take on more risk, changing their output mix and practicing less diversification. This is particularly the case because the proposed programs are linked to crop insurance (CSO). FAPRI (2012) show that assumptions on the participation in one program has a large impact on the total cost of the system due to the complex linkages envisaged between crop insurance and the complementary shallow loss payments.

It is noteworthy that ACRE uses state-wide average yields while the ARC and RLC propose to use much more volatile county yields or individual farm yields. Smith et al (2012a) as well as Goodwin et al (2012) consider this to be a major danger for the farm program budget. Indeed, with a reference that is more closely linked to individual behaviour, there is a risk that these programs increase farmers' incentives for moral hazard behaviour. This is particularly the case with farm yield based payments. More generally, Smith et al (2012a), FAPRI (2012) find that the shallow loss programs proposed by the Senate and the House Committee could be very expensive. FAPRI also find some limited savings under average circumstances, but the risk of large payments for a given year. Smith et al. suggest that the proposed programs would be more expensive than the direct payments programs that Congress wants to eliminate.

Sumner and Zulauf (2012) think that the type of shallow-loss programs proposed by both the Senate and the House amount to a new entitlement. They point out that because payments would be automatically triggered by revenue shortfalls and would be linked to average revenues, the system would generate a de facto entitlement program that locks farmers into the highest incomes. Smith et al (2012) express a similar idea and conclude that shallow-loss subsidies proposed by Congress would be tied to the amount of land that households farm. Not only would the large farmers receive most of the payments, the programs would also capitalize in the equity of landowners.

Smith et al (2012) and Sumner and Zulauf (2012) find that the incentives provided by the proposed policies, through risk reduction, might have large negative environmental consequences, in particular by removing incentives to contract for conservation and by providing more incentive to crop marginal land and use chemical inputs. Finally, the shallow loss programs proposed by Congress seem to ignore the US WTO commitments. They could trigger WTO complaints against the US, but also put the US in a rather unfavourable negotiation position for future agreements.

3.6. The interpretation of the proposal within the framework of WTO negotiations and ongoing legal challenges

Several of the changes proposed to the current farm legislation by Congress have far reaching international consequences. While the proposals have relatively little impact on the situation in the US regarding its commitments on export discipline and market access, the proposed combination of insurance and shallow loss payments would most likely increase the level of distorting subsidies in the US.

3.6.1. Export discipline and market access

In the Title III, i.e. "Trade", the current provisions regarding foreign food aid are only marginally changed by Congress (see EP, 2008 for details). Both the Senate and House Committee proposal reauthorize international food aid programs, including the P.L. 480 now called "Food for Peace". The House proposal includes some administrative changes, and a reduction in the funding to support aid organizations, as opposed to the Senate version. Both versions include rather minor programs for improving the nutritional quality of food products distributed. The Senate restricts the possibility to monetarize food aid to fund development projects, and the House proposal reduces the budget for emergency and nonemergency food aid (from \$2.5. billion each fiscal year to \$2 billion). The Senate proposal would ban food aid to North Korea (not the House).

Both bills reauthorize funding for the CCC Export Credit Guarantee program and various agricultural export market promotion programs, but the Senate bill reduces the value of guarantees to US agricultural exports from \$5.5 billion to \$4.5 billion annually.

The proposed changes to the export programs introduced by Congress do not appear to have significant consequences regarding the position of the US relative to its WTO commitments on export competition.³⁶ It remains that the GSM 102 program is maintained, while it has been accused of acting as export subsidies (it has been challenged under the WTO by Brazil in the cotton case), even though the Senate bill reduces the corresponding budget.

The Senate and the House Committee proposals do not involve changes in market access that would modify the US situation regarding the WTO. The House proposal requires that the USDA examines the compliance of the US policy regarding the COOL (Country of Origin Labelling) that was introduced by the FCEA and has been seen challenged by third countries under the WTO. The Senate proposal does not include such provisions.

3.6.2. Domestic support

The US is currently committed to spending no more than \$19.1 billion per year in support entering in the AMS under the 1994 Agreement on Agriculture. Unless a Doha Agreement is concluded, this ceiling should remain unchanged. The Farm Bill versions proposed by Congress are likely to significantly change the current US AMS. While it is even uncertain that the US respects its maximum AMS ceiling in 2012, due to the possibility of very high crop insurance payments, the shift towards shallow loss programs proposed by Congress might be a problem. Three factors will be key in determining the US AMS, the cost of the programs; the proposals' design and objectives; and whether they can be considered as "non commodity specific".

The current notifications. The most recent WTO notification of US domestic support refers to the 2009 marketing year.³⁷ This makes it possible to assess the changes brought about by the Farm Bill proposals and the current (or at least relatively recent) notifications to the WTO. Currently, the main farm support programs have the following status:

- The decoupled direct payments (that the Congress proposal eliminates) are classified in the Green Box. Some \$5.2. billion were notified in 2009;

³⁶ The FCEA made the export credit programs more compatible with WTO obligations, and repealed the Export Enhancement Program and the Supplier Credit Guarantee Program.

³⁷ Notification G/AG/N/USA/80/, 29 August 2011, downloadable from the WTO website. Note that some of the information mentioned is for crop year, leading to some inconsistencies

- Conservation payments, which are also reduced by Congress in the two proposals, are classified in the Green Box, under various items (mostly \$4.4 billion for environmental payments);
- Price support for program crops is counted as "product specific" in the Amber Box. The total amount before the application of the *de minimis* clause was \$4.1 billion, mostly for dairy and sugar. However, not all this support is eventually counted in the AMS thanks to the *de minimis* provisions. That is, for all commodities except dairy, sugar, mohair and wool, the sum of the corresponding price support and the product specific direct payments is lower than 5 percent of the value of production. This allows them to be removed from the AMS calculation under the *de minimis* clause;
- Marketing loan gains and commodity loan forfeiture are counted as "product specific" in the Amber Box. If we add other (minor) payments to these programs (livestock assistance and forage payments, tree assistance payments, crop assistance payments), the combined amount in the WTO notification was \$0.7 billion in 2009, before *de minimis*;
- ACRE payments were counted as "product specific" direct payments in the Amber Box. They accounted for \$0.5 billion, before *de minimis*;
- CCP are counted as "non product specific" direct payments in the Amber Box. In the notification for 2009, they amounted to \$1.2 billion, before *de minimis*;
- SURE payments are counted as "non product specific" direct payments in the Amber Box. In the notification for 2009, they amounted to \$0.16 billion, before *de minimis* (it is worth noting that the year before, the SURE payments were much higher, i.e. \$2 billion). Livestock disaster programs are also notified under the Amber Box, but as "product specific". Other, small programs were notified under the Green Box as well as NAP outlays.
- Crop and revenue insurance payments are counted as "non product specific" direct payments in the Amber Box. In the notification for 2009, they amounted to \$5.4 billion, before *de minimis*.

The issue of commodity specific support and de minimis. Even if Congress continued the current policy, there might be some issues regarding the level of US domestic support and the US AMS ceiling. One key element is the importance for the US of the *de minimis* clause, and in particular the "non product specific" provisions. Indeed, because of the large volume of production in the US, the *de minimis* clause for non product specific support (i.e. not counting Amber Box support that is lower than 5% of the value of production in the AMS) offers the possibility to offset very large amounts of non specific support. This is less the case if the support is considered as product specific, since in this situation, there are several (smaller) product specific *de minimis* ceilings, for each group of commodities.

The US has made considerable use of the *de minimis* provision. In the most recent notification, only \$4.3 (out of \$5.5 billion) of product specific Amber Box support was counted as the AMS, the difference being taken out thanks to the product specific *de minimis* clause. And \$6.1 billion of non product specific Amber Box support was taken out of the calculation of the AMS thanks to the product specific clause. In brief, the *de minimis* clause has allowed the US to count only \$4.3 billion instead of \$11.5 billion of Amber Box support in the AMS. While this would have had little consequence in 2009 (remember that the AMS ceiling is \$19.1 billion), there are years when the US would have approached (2005) and even exceeded (2001) its AMS ceiling if it had not exempted large amounts of support as *de minimis* (see Figure 4 and EP, 2008 for a complete analysis).

The conclusion is that if current programs are successfully challenged as being "crop specific", or if future programs are designed in a way that make them fall in this category, the US will have much less freedom to exclude large Amber Box support from the AMS calculation.

Potential WTO issues with the current insurance programs. If the current crop insurance subsidies were to be counted as product specific, this might have far reaching implications. As described in section 2.1.3, the cost of the insurance programs has increased dramatically over time and it now appears as a major source of public transfers to farmers (see also EP, 2012). The US has recognized that its crop insurance programs do not meet Green Box criteria (Box 6). But it has notified its insurance programs as non-product-specific Amber Box support. This is possibly a controversial issue given that almost all insurance contracts are written for a specific commodity, not for a whole farm. It could be potentially challenged by third countries since, as noted by Zulauf and Orden (2012) the variation of the subsidies by crop is not likely to be explained by in-common random weather events but is inherently related to the riskiness of the climate in which the crop is grown. Should the payments by the crop insurance program be requalified as a product-specific program rather than a non-product-specific program, the *de minimis* latitude to exclude them from the AMS would be reduced. The same issue holds for SURE and CCP, even though the amounts of support are much smaller.

A second potential issue is that in its notification to the WTO, the US calculates its insurance subsidy as the public subsidy for insurance premia. In the past (e.g. 2007 notification) the calculation was based on the net indemnities paid to farmers less insurance premia paid by farmers (Orden and Zulauf, 2012). This technical change could prove crucial for the US to remain below its AMS ceiling in years of severe drought like the current year (Box 6). However, this way of calculating public subsidies could be controversial. The fact that the government subsidizes private companies and compensates them for administrative costs also contributes to lowering the premia. This, as well as the government reinsurance provided to the private insurance companies can be considered as part of the farm subsidy.³⁸ In both cases, this leads to lower premia for farmers than if an equivalent amount of reinsurance had to be purchased in the private reinsurance market.

Possible issues with the future insurance programs. A drought ridden year like 2012 could lead the US to get close to its AMS ceiling. The way the insurance subsidy is calculated in the WTO notification, and the fact that it remains in the "non crop specific" category is decisive in determining how it is counted against the AMS ceiling (Box 6). The proposals by both the House and Senate will most likely increase the cost of insurance subsidies (see section 3.5.2). Neither of the proposed insurance subsidies is designed in a way that will make them eligible to the Green Box. The proposals do not ensure that these insurance programs are "non product specific" (even though it is likely that the US will keep notifying as such).

³⁸ The reimbursement of the management costs to insurance companies and the reinsurance costs are currently notified as Green Box.

Box 6. The 2012 drought and the US AMS

Will the insurance, shallow loss and countercyclical payments lead the US to exceed its AMS ceiling in 2012? Here, we provide a crude estimate on this uncertain and complex issue. It appears that two technicalities might have a considerable importance, i.e. the way that the US notifies reinsurance subsidies; and the fact that the US notifies subsidies to insurance premia as "non product specific".

Assume that the crop specific AMS remains unchanged relative to 2009 (i.e. more than \$4 billion after *de minimis* exemptions). In 2012, the CCP should be zero. The SURE payments are not authorized for 2012, but farmers that experienced past yield losses are eligible for payments, that we can estimate to be a bit more than \$1 billion following ERS-USDA projections. In spite of the drought, and thanks to higher prices, the value of US agricultural production should increase by more than 3 percent. This has direct consequences on the level of non specific subsidies that may be deducted from the AMS calculation thanks to the *de minimis* clause. Given the USDA output projections, a crude calculation could be that the *de minimis* allows the US to take \$18 billion out of Amber Box support from the AMS in 2012.

This means that in any case the US would not exceed its commitments provided that insurance subsidies are less than \$14 billion. And that if insurance subsidies can be counted as *de minimis*, the US would not exceed its commitments even if insurance subsidies reached \$17 billion (for these subsidies plus SURE payments to be taken out the AMS as non product specific *de minimis*).³⁹

Now (for the two recent notifications, i.e. year 2008 and 2009) the US notifies only the subsidies to insurance premia as "Amber", and those to reinsurance as "Green". In addition, the insurance premia are notified as "non commodity specific" support (which allows using the non commodity specific *de minimis* provisions).

If we take the (perhaps exaggerated) estimate that with the 2012 drought, there might be some \$18 billion net insurance payments insurance (i.e. indemnities claimed minus the \$11 billion premia, with \$7 billion of the premia being paid by the taxpayer). The US government may end up covering \$13 billion out of these \$18 billion (see Box 4). This, with the \$7 billion of insurance premia subsidies and \$1 billion of operating expenses, would put the cost of the whole insurance program to \$21 billion.

However, if the US notifies its insurance subsidies the same way it did for the years 2008 and 2009, it will count only the \$7 billion of premia subsidies as "Amber" (the \$13 billion above will be considered as reinsurance and notified as "Green" as well as the \$1 billion of operating expenses subsidies). Second, since these \$7 billion will be notified as non commodity specific, they will be taken out of the AMS under the *de minimis* clause. Overall, the insurance subsidies will not be counted at all in the AMS in 2012, provided that the US uses the same conventions as for 2008 and 2009.

³⁹ David Orden (private conversation) suggested that the US could also shift to counting insurance subsidies as product-specific. With the elimination of of market price support, in particular by finding different ways to report support currently linked to administered prices for dairy or sugar and, voila, the US could perhaps find an alternative way to keep its AMS under the WTO ceiling. See Blandford and Orden (2011) and Orden and Zulauf (2012).

With these conventions in the notification, the US is therefore unlikely to exceed its AMS ceiling. However, the exercise shows how much the US respect of its international commitments relies on particular conventions in notifying its insurance subsidies. Indeed, if the \$13 billion of net insurance payments paid by the taxpayer (in our scenario) were counted as "Amber", and even leaving the \$1 billion operating expenses as "Green", the US would not be able to deduct the \$13 billion plus the \$7 billion of premia subsidies plus the \$1 billion of SURE from the AMS under the de minimis clause. So the total AMS would be these \$13+\$7+\$1 plus the \$4 billion of commodity specific AMS. In this calculation, the \$18 billion of net insurance payments are a wild guess and are perhaps exaggerated (see Box 4), but in any case, the US would most likely exceed the \$19.1 billion AMS ceiling. As mentioned by Orden and Zulauf (2012), it is possible that some third countries challenge the conventions described above, in particular the counting of reinsurance as "Green".

Note: *the author thanks David Orden, Dan Sumner and Vince Smith for sharing opinions on this issue, but remains the sole responsible for any erroneous statement in this Box.*

Proposed shallow loss payments and the WTO. The main potential WTO issue raised by Congress' proposals is that the current combination of crop insurance, SURE and ACRE will be replaced by a broader insurance system, but also complemented by a potentially broader system of shallow loss payments (e.g. the ARC or the PLC/RLC system depending on which proposal one refers to).

It is unlikely that systems such as the ARC and/or PLC/RLC will be eligible for the Green Box, given the way they have been designed. The Agreement on Agriculture does refer to a five-year base period, with the best and worst income years excluded from income support payment calculation for Green Box eligibility (Annex 2, paragraph 7a). This mode of calculation is used for the references in several of the programs proposed in the Congress versions of the future Farm Bill. There are however, other conditions that hardly seem satisfied. WTO discipline recognizes a set of programs as Green Box if it has "no, or at most minimal trade-distorting effects or effects on production" (see Brink, 2011). Another criterion is that it meets the particular conditions set out for disaster assistance payments (Annex 2, paragraph 8) or income safety net programs (paragraph 7).⁴⁰ None of these provisions are likely to apply to the ARC and/or PLC/RLC programs. The proposed programs are tied to specific crop prices and yields, and they should normally be notified in the product specific AMS category, or in any case in the Amber Box. The Senate proposal with references to individual yields in ARC is even more unlikely than the current countercyclical and ACRE programs from being decoupled from production. Where the ARC and PLC/RLC notified as Green Box, they would undoubtedly be challenged as WTO illegal.

If we rely on CBO estimates, a conservative assumption compared to the projections by FAPRI (2012), the sum of the insurance and commodities (including the shallow loss programs) in both the Senate and the House Committee bill would reduce expenditure by \$1.4 billion a year (with an increase in insurance and ARC or PLC/RLC funding offset by a cut in direct payments, CCP, ACRE and SURE). However, the probability of exceeding the AMS ceiling is much higher in the new system, for two reasons. First, in the new system, all these payments would be in the Amber Box (while the fixed direct payments are currently in the Green Box). Second, in the new system, the funding would rely entirely on market

⁴⁰ For crop insurance programs to be "at most minimally trade distorting", subsidies must be small and percentage losses must be large (at least 30 percent). The schemes designed by Congress clearly do not meet these criteria. The income insurance payments "shall not relate to the prices, domestic or international, applying to such production" (paragraph 7c) nor to volume of production in years following the base period (paragraph 6 b-d).

and yields conditions, while in the current system the direct payment share is fixed. This means that any bad year could more easily lead to an AMS above the \$19.1 billion threshold. The situation would be particularly risky if all the new payments were counted in the "commodity specific" category, which is where they probably should be.

In brief, the proposals for the US Farm Bill significantly modify the conditions for attribution of some direct payments. The shift from decoupled payments towards programs that require revenue loss and revenue targets that change with the market make the US farm policy less compatible with US international commitments.

The cotton issue. One of the objectives of the STAX program that is endorsed by both the House Committee and the Senate seems to be to help solve the industry's WTO trade disputes with Brazil (Box 7). It is unlikely that it will reach this goal. The proposed STAX is close to a crop insurance policy for cotton growers; it guarantees that farmers' incomes will not fall below the revenues expected in their regions. It is difficult to see how the issues raised by the WTO dispute do not apply to this proposed policy. Brazil has actually expressed some concerns about the proposals.

The WTO dispute on cotton described in Box 7 has broad implications for the Farm Bill proposals as drafted by Congress. Indeed, the Agreement on Agriculture is not the only constraint in international trade. The WTO Agreement on Subsidies and Countervailing Measures (SCM) also specifies that government subsidy programs may not significantly suppress world prices or otherwise significantly distort market conditions (Josling et al, 2006). In particular, in the cotton case, a series of payments, including the marketing loans payments, but also the CCP were found to suppress market prices. Since the end of the Uruguay Round Agreement "peace clause" in 2003, the suppression effects have been the basis for successful complaints about domestic agricultural policy. The cotton case created a jurisprudence in that matter, after the WTO appellate panel found that certain US cotton programs were responsible for lowering world prices and damaging Brazilian producers.

Whether a panel and the Appellate Body would find that the ARC and the PLC/RLC cause significant price suppression on the world market is best left to specialized lawyers. One could argue that in the cotton case, the former Production Flexibility Contracts were not found as a cause of price suppression. This might mean that ARC and PLC could also be found to comply with the SCM criteria. However, the ARC relies on providing subsidies to US farmers when prices go down and it would raise revenue guarantees when prices and yields are increasing. Zulauf and Orden (2012) believe that the ARC program would also provides incentives to expand the production of covered crops and that this would open a window for WTO complaints against the US.

Box 7. The "cotton" case

In the dispute settlement case (WTO DS267) Brazil claimed that various provisions of the US cotton program constituted production subsidies, export subsidies, or violations of the principle of equal treatment for imports (see Schnepf, 2011). In 2004, a WTO panel found that certain US provisions including (1) payments to cotton producers under the marketing loan and counter-cyclical programs, and (2) export credit guarantees (under the GSM-102 program, see EP 2008) were inconsistent with WTO commitments. In 2005, the US made several changes to the cotton policy which were considered to be inadequate by Brazil.

A WTO compliance panel ruled in favour of Brazil in 2007, and the ruling was upheld on appeal in 2008. The WTO ruled that loan rate program benefits and CCPs for cotton constituted production subsidies and had depressed the world price of cotton and harmed Brazilian cotton producers. The WTO also ruled that export credit guarantees used to facilitate exports of cotton constituted prohibited export subsidies. The US did not significantly reform its cotton subsidies in the 2008 Farm Bill. In 2009, a WTO arbitration panel allowed Brazil to enforce trade countermeasures. Brazil was also entitled to cross-retaliation under certain conditions, an exceptional decision.

The threat of retaliations announced by Brazil led to a mutual agreement in April 2010. This made it possible to officially close the case with a mutually agreed solution to the cotton dispute in June 2010 (WT/DS267). The agreement that suspended Brazil's retaliations included payment by the US of a \$147 million annual fund to a "Brazilian Cotton Institute" to provide technical assistance and capacity building for Brazil's cotton sector, discussions on how to limit trade distorting effects of US cotton after the 2012 Farm Bill, and modification of the export credit program GSM-102 coupled with a semi-annual review. Brazil also obtained modification of its animal disease status, with a degree of regionalization that the US had refused before.

The dispute resumed when, in June 2011, the House Subcommittee on Agricultural Appropriations removed funding for the 2012 payment to Brazil, in a violation of the negotiated settlement. Brazil has since threatened to raise tariffs on US exports to Brazil and restrict intellectual property rights for US products in the Brazilian market.

4. CONCLUSION: ISSUES FOR THE EU

KEY FINDINGS

- There are very few areas of convergence between the CAP reform proposal and the US Farm Bill proposals. Concerns about volatility of prices and incomes are shared, but the EU responds to them with much more limited instruments than the US arsenal of measures.
- In almost every other area, the CAP reform proposal and the Farm Bill proposals diverge. While the EU reform should further reduce distortions on the world market, the US appears to be protecting farmers from any possible adverse event. The EU, and in particular the EU Commission, seems more concerned than the US about respecting the general spirit of multilateral trade discipline when passing an agricultural policy reform.
- Because the US policy protects farmers but maintains an environment favourable to their competitiveness, there is a risk for the EU. The EU enforces reforms that tend to remove the distortions created by the CAP on world market. By doing so it respects not only the multilateral rules but also acts in a way that favour progress in international discipline. At the same time, emerging countries increasingly support their farmers; and the US protects its farmers from adverse situations and provides them with the resources to develop an aggressive export policy. At the end, the EU might face increased competition, unless a stricter WTO discipline is enforced through a Doha Agreement.

Some common concerns. In section 1.3, we summarized the main differences between the EU and the US regarding the institutional settings and the policy design in agriculture. If we compare the CAP proposal released by the EU Commission in October 2011 (see Annex 5) with the Congress proposals for a 2012 Farm Bill, there are a few common aspects. One shared concern seems to be the need to help farmers cope with price or income volatility. In the EU, this has led the Commission to propose a series of measures, namely a mutual fund for disaster, insurance and income stabilization program.⁴¹ In the US, the "safety net" instruments, i.e. the combined insurance and disaster and income loss compensation programs are strengthened in both the House Committee and the Senate proposals.

Both the scale and the ambition of the EU and US programs are nevertheless very different. The Commission proposal would authorise Member States to develop a system of insurance and an income stabilization tool with some cofinancing from the EU budget, but with many ceilings.⁴² This ensures that these programs will remain limited, that they will comply with the WTO discipline, that they will not cover more than 70 percent of the losses (insurance), and that the subsidy's rate will not exceed 65 percent. The fact that some cofinancing is required from Member States is likely to act as a deterrent for implementing large scale

⁴¹ Respectively Article 19 and 25, 37 to 40 in the CAP reform proposal COM(2011) 627 final.

⁴² The proposal states that "support measure shall cover: (a) financial contributions, paid directly to farmers, to premia for crop, animal and plant insurance against economic losses caused by adverse climatic events and animal or plant diseases or pest infestation; (b) financial contributions to mutual funds to pay financial compensations to farmers, for economic losses caused by the outbreak of an animal or plant disease or an environmental incident; (c) an income stabilisation tool, in the form of financial contributions to mutual funds, providing compensation to farmers who experience a severe drop in their income" (Art 37).

programs. The US proposals clearly dwarf the EU one in terms of loss coverage and potential budget.

In the EU Commission proposal, there is some degree of recoupling for specific production, but for a very limited percentage of the total envelope of direct payments. This support may only be granted to sectors or to regions of a Member State where specific types of farming or specific agricultural sectors undergo certain difficulties and are particularly important for economic and/or social and/or environmental reasons (Article 38 COM(2011) 625 final). Even with these measures the production linked support will remain much narrower than the US system of marketing loans.

There are not many other areas where some convergence can be found between the CAP reform proposal and the draft Farm Bills. The EU makes a limited move towards a nutrition component, through school programs, but it would remain very small in comparison with the various US nutrition programs.

Divergence between the CAP and the Farm Bill proposals. If we compare the Commission proposal to the Senate and House Committee versions of the 2012 Farm Bill (Table 3), a fundamental divergence is that the US is moving towards further isolating its farmers from adverse conditions and in particular from downward market fluctuations. The US combination of insurance and shallow loss payments would trigger payments as soon as revenue falls by 10 or 11 percent, according to the versions tabled. By contrast, the EU maintains a system of fixed payments that do not depend on market conditions and yields.

The US Farm Bill is likely to downsize conservation programs, and in particular the ones that rely on land retirement. At the same time, the EU is proposing to encourage the preservation of biodiversity on 7 percent of farmland through the "ecological focus" provision in the "green payment" scheme, which may involve some land retirement. In the US there is no linkage of public support to the provision of public goods, if we ignore the proposal from the Senate to restrict subsidised insurance premia for those who put erodible land into arable crop production.

Finally, the US shows little consideration for multilateral discipline when designing its farm policies, while the Commission presents further decoupling of support as a way to position the EU in the prospect of a Doha Agreement and ensures that the proposals (e.g. the risk management tools) are compatible with the Uruguay Round Agreement on Agriculture.

Table 3. Comparison of the EU Commission proposal for the CAP and the US Farm Bill proposals for the 2012 Farm Bill

	EU Commission's proposal	US Congress's proposals
Market support	Dismantle market price support and supply control for sugar. Maintain intervention for wheat and a minimum price for skimmed milk powder but for limited amounts.	Maintain the loan rates (minimum prices) for all commodity crops and the marketing loan system.
Direct payments	Finalize the decoupling of the direct payment and make it more uniform across the EU. Distinguish three layers of payments (basic, green, young farmer scheme). Cap direct payments. Exempt small farms. Allow some recoupling of some payments for specific regions and productions but with a ceiling (5 percent or 10 percent of total direct payment envelope, to be decided). Redesign natural constraints payments (limited to 5 percent of the direct payment envelope)	Eliminate the fixed, decoupled direct payments. Replace the countercyclical payments with systems that are part of a broader package of insurance and shallow loss payments (PLC in the House bill). Introduce some capping but with very high ceilings.
Safety nets	Support to private storage in case of crises for meat, olive oil, butter and milkpowder. Implement a reserve crisis fund. Disaster (Article 19) and insurance and income stabilisation schemes (Article 37-40) are left to Member States, with some cofinancing and ceilings of 65 percent of the premia/costs, preventing overcompensation.	Expand the already ambitious and costly insurance program (CSO). Replace the ACRE by a broader ARC program (Senate) or a RLC program (House). Both would trigger payments for small changes in income (10 or 11 percent fall) as a complement of crop and revenue insurance. Develop a specific system for cotton (STAX)
Environment	Introduce some conditionality (to crop rotation, maintenance of permanent pasture and ecological focus.	Reduce the budget for conservation, especially for land retirement programs
Nutrition	Increased funding for school milk and fruit programs, but nutrition programs would remain very small	Cut the very large nutrition programs, in particular the food stamps (larger cuts in the House than in the Senate version)

Will the Farm Bill curb the CAP trajectory? The EU has followed a more consistent policy over time than the US. Since 1992 the CAP reforms have continuously moved towards a system of production neutral support, less interference with market signals, as well as a shift towards rural development and conservation type policies (EP, 2012). This orientation was also taken in the US after 1985, but the policy reverted with the 2002 Farm Bill (see section 1.3.). The proposals by both the Senate and the House Agricultural Committee for the 2012 Farm Bill tend to confirm this turnaround. By expanding crop insurance, shallow loss payments and other production or price related payments, ending the fixed decoupled payments and reducing the conservation payments, the US protects its farmers, provides them with an environment favourable to production, but avoids going back to the 1980s price and supply sided policies which hampered exports.

A major question is whether the US orientation should lead the EU to curb its trajectory. The recent EU reforms have been the product of sound economics (decoupled payments generate less distortions than price support); fiscal responsibility (the EU single farm payment budget is very large, but it is transparent and cannot lead to supplementary appropriations); more public goods (rural development budget has expanded); and the willingness to preserve, and even enhance the first efficient multilateral rule based system ever implemented, i.e. the WTO. The October 2012 Commission proposal for a post 2013 CAP continues in the same direction. The proposal would complete the elimination of price support and supply control in the sugar sector, reduce the overall level of support (at least in real terms) and would bring more cross compliance between farm payments and the protection of the environment, paving the way for future reforms focusing more on public goods.

Is this consistent EU policy compatible with the US one? Most economists are critical of the orientations of the US Farm Bill proposals by Congress, which opens the door to more market distortions, and to policies whose cost efficiency is likely to be lower than the measures being eliminated (e.g. decoupled payments). However, given the political environment, it is unlikely that the US will move back to its 1996 orientation. It seems to have given up setting an example for the world to follow by complying with the rules as well as the spirit of policy reform and multilateralism. This affects the global agricultural and food markets. Other countries will have to cope with a US policy that exports more its own price volatility by insulating its producers from fluctuations, distorts markets by blurring price signals, and which places little importance on multilateral cooperation.

For the EU, the US Farm Bill is hardly an example to follow. The EU should be cautious of not adopting a wasteful insurance system such as the current US crop insurance, or the proposed CSO which does little to solve the drawbacks of the current system. The EU should also be cautious when considering adopting countercyclical or shallow loss payments à la US, which could easily become a fiscal bomb. More generally, there is a strong case against making the EU direct payments more countercyclical, as explained in EP (2012).

However, with the current proposals for the Farm Bill, the US farmer will benefit from a policy that provides a favourable environment to take risks, produce and export. The Farm Bill is likely to be costly for taxpayers but may turn US producers into even more aggressive competitors. While the EU orientation on farm support is more cooperative in the global arena and more efficient in transferring support to producers, it could be undermined by the US policy, which provides farmers with a secure environment and less regulatory constraints to conquer world markets. This may prove a tough test for the EU policy. With farm support (most of it coupled) on the rise in China, Russia, Brazil and Ukraine (see EP, 2012), and with a US policy that is increasingly uncooperative and distorting, the EU may soon feel isolated.

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ANNEXES

Annex 1. Initial estimates of the costs of the FCEA and current situation (million \$)

Farm Bill initial estimates (average 2008-2012)		USDA Actual Outlays (2011)	
Planned outlays, mandatory		Actual outlays 2011 (mandatory and discretionary)	
		Discretionary	
Commodities (Title I)	8326	Commodities and international	366
Conservation (Title II)	4822	Rural Development	2572
Trade (Title III)	371	Forest Service	4694
Nutrition (Title IV)	37780	Conservation	808
Credit (Title V)	-285	Food Nutrition service	6585
Rural Development (Title VI)	39	Research	2361
Research (Title VII)	64	Marketing and regulatory programs	2001
Forestry (Title VIII)	8	Central administration	494
Energy (Title IX)	129	Mandatory	
Horticulture/organic (TitleX)	81		
Livestock (Title XI)	0	Food and Nutrition Services	94689
Crop Insurance (Title XII)	4372	Commodity Credit Corporation	10276
Commodity Futures(Title XIII)	0	Crop insurance	6387
Miscellaneous (Title XIV)	9276	Natural resources & Conservation	2628
Disaster assistance (Title XIV)	761	Agricultural Marketing Service	1167
Tax / Other	-960	Forest Service	688
		Rural development	-2706
		Receipts	-748
Total	56784	Total	139402

Source: March 2007 baseline of the Congressional Budget Office for planned expenditure. For actual expenditure, budget of the Federal Government 2013. White House budget. (the US Fiscal Year goes from 1 October to 30).

We have not been able to reconcile the actual expenditures and the ones planned by the CBO, which normally cover the mandatory spending under the Farm Bill (left side of the Table). The right side of the Table shows the actual expenditures in 2011, from the White House annual report, which includes both mandatory and discretionary spending. In spite of the inconsistency between the sources and the difficulty in comparing it with the left hand side, it is visible that some programs cost more than expected (nutrition, insurance, CCC).

Annex 2. Congressional Research Service's survey of the proposals for reforms of the US farm support

Proposal	Description	Eliminations / Net savings
Group I. Modify Current Policy		
Administration: Deficit Reduction Plan	Reauthorize CCP, ACRE, SURE, and marketing loan program; lower crop insurance expenditures by reducing producer subsidies and company payments for expenses/risk-sharing.	Eliminate DP. \$33 billion savings over 10 years (including separate conservation savings).
Senator Coburn: Deficit Reduction Plan	Maintain crop insurance and guaranteed farm loans.	Eliminate all farm commodity programs.
Revised Counter-Cyclical Price Program	Modify the current CCP program by making payments on planted acreage (not base) and raising target prices.	Cost not available.
Group II. New Revenue Programs		
S. 1626, Aggregate Risk and Revenue Management (ARRM) by Senators Brown, Thune, Durbine, and Lugar	Crop revenue program—makes payments (by program crop) on 85% of planted acres when two triggers are met: (1) farm revenue is below guarantee, and (2) crop revenue at crop reporting district level is below guarantee. Both use historical crop insurance prices.	Eliminate DP, CCP, ACRE, and SURE. CBO previously estimated \$20 billion savings over 10 years. Payments capped at 15% of CRD guarantee.
S. 2261, Revenue Loss Assistance Program (RLAP) by Senators Conrad, Hoeven, and Baucus	Crop revenue program—makes payments (by program crop) on plantings when farm revenue is below guarantee (88% of historical revenue). Losses below 75% are not covered. Price is higher of target price or 5-yr Olympic ave. farm price.	Eliminate DP, ACRE, and SURE. Reauthorize marketing loans and CCP. Cost not available.
Risk Management for America's Farmers (RMAF) by American Soybean Association	Crop revenue program—makes payments (by program crop) on planted acres when actual crop revenue is below guarantee. Guarantee based on APH or county yields and higher of target price or 5-yr Olympic average farm price.	Eliminate DP, CCP, ACRE, and SURE. Cost not available.
Group III. Crop Insurance		
Stacked Income Protection Plan (STAX) by National Cotton Council	STAX is described for cotton producers only. Farmers could buy insurance coverage to protect against shallow losses under an area-wide insurance product with a fixed minimum harvest price; would be in addition to a farmer's individual policy.	Eliminate DP, CCP, ACRE, and SURE. Modify marketing loan (2-yr ave. Adjusted World Price within 47 to 52 ¢/lb. range). Cost of \$400 to \$500 million per year.
Total Coverage Option (TCO) contained in H.R. 3107 by Representative Neugebauer	Enable producers to supplement farm-level with area-wide yield insurance to cover shallow losses.	Cost not available.
Environmental Working Group (EWG) Proposal	Replace current farm commodity programs and crop insurance subsidies with a free crop insurance policy that covers yields losses > 30%. Revenue policies and additional yield coverage would be available but not subsidized.	Eliminate current farm programs and crop insurance subsidies. EWG expects a total savings of \$80 billion over 10 years.
Deep Loss Program by American Farm Bureau Federation	Replaces current programs and catastrophic crop insurance with an area-wide (e.g., county) revenue insurance policy. Guarantee would be based on historical prices to address multi-year price declines. Farmers could purchase additional subsidized insurance to cover shallow losses.	Eliminate DP, CCP, ACRE, and SURE. Insurance deductible and premium subsidy rates to be determined by budget cost implications.
Group IV. Other		
Farmer-Owned Reserves (FOR) by National Farmers Union	FOR, increased loan rates, and acreage set-asides. Payments limited to crops placed under FOR.	Eliminate DP, CCP, and marketing loan benefits.

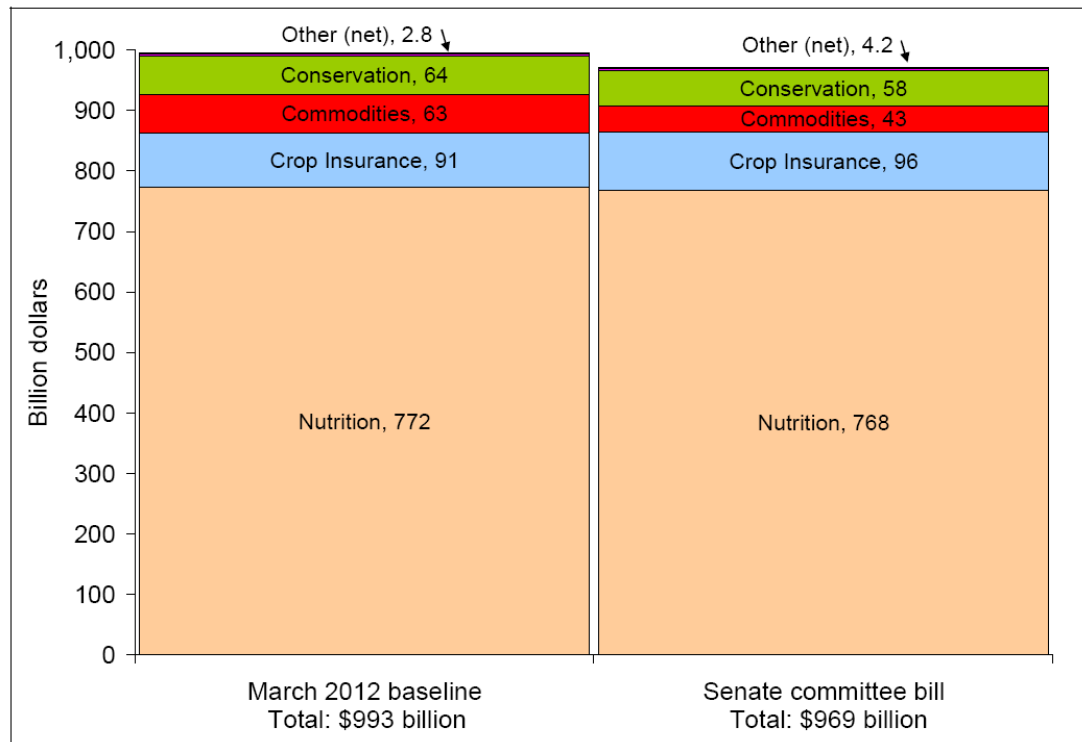
Source: Compiled by CRS from proposal statements, news reports, and other sources.

Notes: If not indicated, costs estimates provided by authors of proposals. Proposals not appearing in this table are described briefly in the section on "Additional Proposals." DP = direct payment, CCP = counter-cyclical payment, CRD = crop reporting district, APH = actual production history (crop insurance yield). The Olympic average excludes high and low years.

Source: Reproduced from Shields and Schnepf (2012).

Annex 3. CBO estimates of the budget changes induced by the Senate proposal of May 2012

Figure 6. Ten-Year Baseline and Outlays under Senate Farm Bill S. 3240
(outlays over FY2013-2022 in billions of dollars by farm bill title)

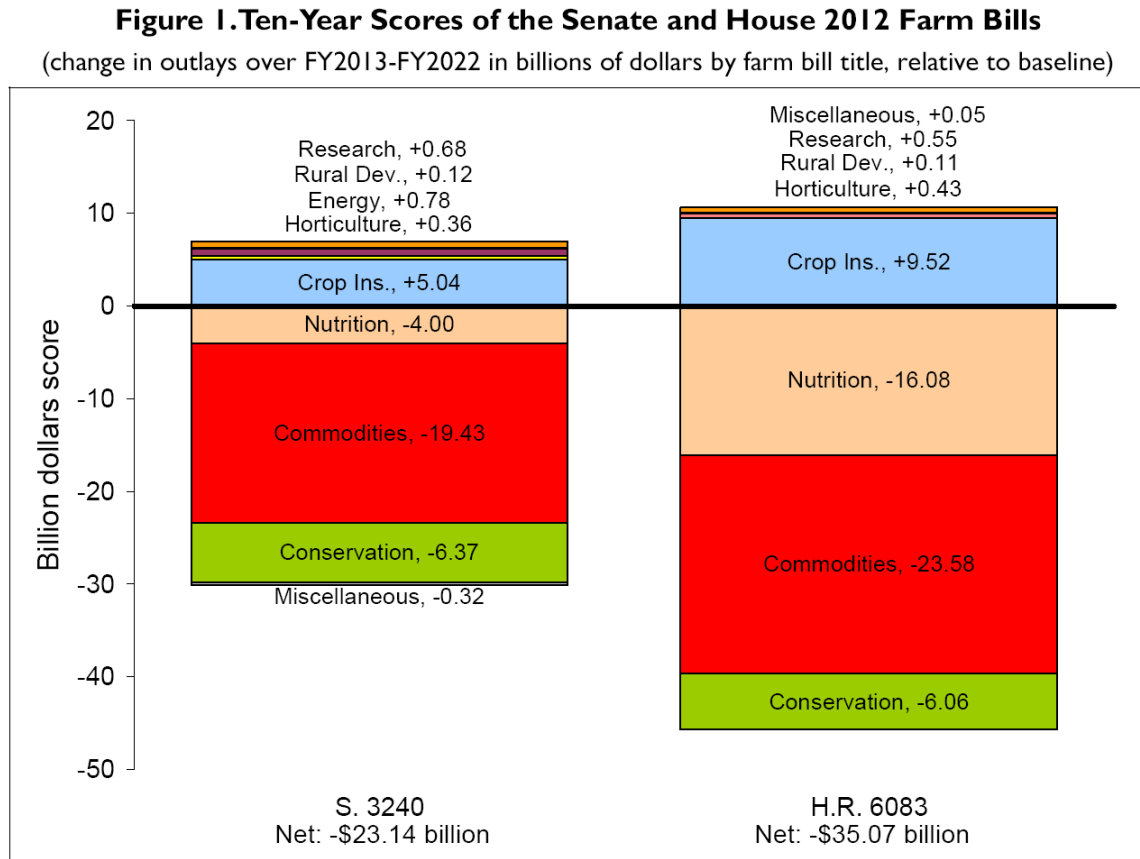


Source: CRS, using the March 2012 CBO baseline and CBO cost estimate of S. 3240, May 24, 2012.

Notes: “Other” in the March baseline includes Trade (\$3.44 billion), Horticulture and Organic (\$1.08 billion), Energy (\$0.75 billion), Rural Development (\$0.03 billion), Research (\$0.21 billion), Forestry (\$0.09 billion), and Credit (-\$2.67 billion). “Other” in the Senate committee bill includes Trade (\$3.44 billion), Horticulture and Organic (\$1.44 billion), Energy (\$1.53 billion), Rural Development (\$0.03 billion), Research (\$0.86 billion), Forestry (\$0.18 billion), Miscellaneous (-\$0.44 billion), and Credit (-\$2.67 billion).

Source: Reproduced from Chite et al (2012).

Annex 4. CBO estimates of the relative budget changes in the Senate proposal and in the Committee for Agriculture of the House of Representatives proposal



Source: CRS, using CBO cost estimates of Senate-passed S. 3240 (July 6, 2012), and House-drafted H.R. 6083 (July 5, 2012).

Source: Reproduced from Chite et al (2012).

Annex 5. A Summary of the Commission proposal

The Commission's proposal for a Post 2013 CAP, released on October 12 2011 includes a reorientation of the direct payments, new instruments for managing markets, and more focus on environmental issues. Overall, spending on Pillar 1 would total €312 billion for the 2014-2020 period, and an extra €101 billion would be allocated to Pillar 2. This funding would be complemented by extra budget coming from other programmes, in particular €5.1 billion for research and innovation; €2.5 billion for food safety; €2.8 billion for food support to deprived persons; €3.9 billion for the new reserve for crises in the agricultural sector; and €2.8 billion in the European Globalization Adjustment Fund.

Market management. The intervention would remain in place for wheat (limited to 3 million tonnes a year), butter (capped at 30 000 tonnes) and skimmed milk powder (capped at 109 000 tonnes). A tendering process, rather than an automatic buy in would be in place for barley, maize, paddy rice, beef and veal. Private storage aid would cover sugar (after the end of the quotas, which would occur in 2015), olive oil, flax, beef, butter, skimmed milk powder, pig meat and sheep meat. The aid to dispose of surplus milk powder and casein would be abolished. The recognition of producers' organisations would be extended to all sectors. Public intervention, private storage and export returns would be funded from a €3.5 billion "crisis reserve" separate from the CAP and Multi Annual Financial Framework.

Direct payments. A "Basic Payment" scheme would replace the current Single Farm Payment and the Simplified Area Payment Scheme. All EU member states would have to move towards a uniform payment per hectare at the regional level by 2019. National envelopes for direct payments would be adjusted so that those that receive less than 90% of EU average payment per hectare would receive more, so that the gap would be reduced by one third by 2018. Direct payments in excess of €150 000 would be capped at progressive rates with an absolute ceiling of €300 000 (exclusive of the greening component). A simplified flat rate system would be introduced for small farms, which would also be exempted from greening requirements.

A greening element would be introduced. Some 30% of direct payments would be conditional on three measures, crop diversification (arable farmers would have to cultivate at least 3 crops a year, none accounting for more than 70% of the surface and each at least for 5%); devote 7% of land as an ecological focus area; and maintain permanent pasture. The remaining payments (i.e. 70% of the envelope) would continue to be based on cross-compliance, but with simplified requirements. Two extra layers of payments would be allowed, one for areas with natural constraints and the other for young farmers, both subject to limitations (a maximum of 5% of national envelope and 2% of Pillar 1 national envelopes, respectively). New criteria would be introduced for receiving direct payments, that the farmer must be "active", i.e. receiving at least 5% of earnings from agriculture (exemption for small farmers).

Rural development would be reformed significantly, with new priorities. At least 25% of Pillar 2 envelopes would be devoted to climate change mitigation and adaptation and land management measures (including organic farming). A new insurance scheme would see part of farmers' losses reimbursed by a mutual insurance fund if income falls below a certain threshold, within a limit of 70% of the income loss (only 65% of the eligible costs could be supported). Pillar 2 would partially fund this mutual fund, in addition to farmers' contributions. The rates of financing of some Pillar 2 measures by the EU budget would also be revised upwards (LEADER projects, innovation and knowledge transfers, etc.).

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