

**Review and Analysis of
International and Budgetary Considerations for
the 2007 U.S. Farm Bill**

by

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U.S. federal policies pertaining to agriculture, food products, and rural development are determined by various laws. Each law may be reviewed, adjusted, or repealed separately or jointly as omnibus farm bills every four or five years. The farm bill in effect through the harvest 2007 is the Farm Security and Rural Investment Act (FSRIA), enacted into law as Public Law 107-171 in 2002. Due to the lack of a new comprehensive farm bill or separate new laws, most of the FSRIA provisions expire between September 30, 2007, and August 31, 2008, and farm legislation would automatically revert to permanent legislation and statutes, some of which were written in 1920s and 1930s (Womach). Under the permanent law, support would be high for a small number of eligible commodities, but other currently supported commodities such rice, soybeans, and peanuts would not be eligible for federal financial support. Because the permanent laws have little relevance to current agricultural conditions and would be costly, it is likely that Congress will either extend FSRIA provisions, or develop a new farm bill. As pointed out by Womach, the absence of new commodity support provisions before the 2008 harvest would have few immediate financial consequences for agricultural producers other than those associated with uncertain conditions, so it is possible for Congress to act on farm legislation after the 2007 crop year, and up to the 2008 harvest.

In efforts to build broad-based support for legislation pertaining to agriculture, recent farm bills have included titles on a variety of issues that directly or indirectly affect agriculture (Knutson, Penn, and Flinchbaugh, p. 48; Womach). In particular, contemporary farm bills have included titles related to trade, foreign food aid, conservation and the environment, forestry, domestic food assistance, agricultural credit, rural development, agricultural research and education, as well as forestry programs. The farm bills have also included “miscellaneous” provisions pertaining to agricultural marketing, energy, food safety, and animal health and

welfare. Thus, national farm bill deliberations provide opportunities to influence agricultural policies in the future – not only for the legislative and executive branches of the federal government, but also for numerous interest groups.

The current farm policy debate is subject to a number of key influences, including – but not limited to – the U.S. federal government’s budget deficit, increased pressures to comply with international trade agreements, current economic and social conditions in the agricultural sector, and national political considerations. Additional factors were identified by Mercier and Smith. In this paper, we assess the extent to which national budget considerations, international trade negotiations, and domestic political deliberations affect the development of the impending 2007 omnibus farm bill. We briefly summarize past developments leading up to the current federal farm legislation, followed by a brief overview of the elements contained in the 2002 farm bill, and budgetary and international considerations in developing a new farm bill.

U.S. Farm Policy Origins

The U.S. government has long had policies affecting the production and marketing of agricultural products, and its involvement has been questioned equally long. As pointed out by Cochrane (p. 307), government plays a vital role in providing services essential for a successfully operating and economically developing society, but at the same time, government involvement may conflict with the aim of maximizing individual citizens’ freedoms. Thus, discussions surrounding agricultural policy in general and farm bills in particular involve striking a balance on the role and extent of government involvement in the U.S. agricultural and food system.

The reasons for the federal government’s involvement in, and its specific policies pertaining to agriculture have varied over time, as documented by Doering and Outlaw; and Effland. For a large part of the past century, between the 1920s and the middle 1980s, farm

income supports largely consisted of price supports and production controls. This changed with the 1985 farm bill, which included soil conservation as a specific objective (Cain and Lovejoy). The same farm bill and the subsequent 1990 farm bill also included efforts to decouple payments from existing production levels, in attempts to avoid production surpluses in times of low commodity prices (Thompson, 2005).

The 1996 farm bill, known as the Federal Agricultural Improvement and Reform (FAIR) Act, further shifted policies away from price support and output control linked to agricultural production, to direct income support and other relatively less trade-distorting policies. These changes were made in part so as to remain in compliance with international trade agreements, but also in response to increased public calls to conserve natural resources, to enhance rural development, attempts to improve U.S. global competitiveness in agricultural production, and agricultural research needs.

While the 1996 farm bill appeared to mark a move towards relatively free markets with reduced government involvement in farm commodity markets, by 2000, farm program support levels increased to record-high levels due to disaster assistance payments and Loan Deficiency Payments (LDPs). The latter payments are closely tied to production, so their increased importance marked a move away from decoupled program instruments.

The 2002 Farm Bill

In contrast to current conditions, passage of the 2002 farm bill occurred during a time of budget surpluses (Westcott, et al.). Also, the international trade delegation representing the U.S. in the Uruguay Round of trade World Trade Organization (WTO) negotiations had committed the U.S. to limit “amber box” farm payments to a total of \$19.1 billion. As a backdrop, the European Union (EU)’s maximum “aggregate measurement of support” (AMS) was \$67 billion – much

higher than the level of payments made to U.S. farmers (Thompson, 2006).¹ The large discrepancy in subsidy payments between the U.S. and the EU, together with optimistic budget projections, favored continued U.S. commodity support.

In spite of U.S. calls for other nations to reduce their subsidies, members of Congress were willing to support U.S. farmers within the boundaries of the international agreement. Support levels were adjusted for individual programs, but the overall expenditures for the 2002 farm bill eventually increased over previous levels. In particular, the FSRIA reduced the loan rates on soybeans, while increasing those on grains. Also, the 2002 farm bill reinstated a target price system in the form of a new counter-cyclical payment (CCP), turning temporary “emergency payments” spent over funds authorized under the 1996 farm bill into formal program payments. Further, payment limitations were set at higher levels in the FSRIA than in the previous farm bill.

The 2002 farm bill was a reversal from the previous farm bill, which had emphasized a “decoupling” between farm program payments and production levels. That is, the FSRIA allowed making changes to the historical bases, thereby reestablishing a link between previous production decisions and program payments. In addition, an important aspect of the 1996 farm bill was the Agricultural Market Transition Act (AMTA) payment, consisting of a fixed annual payment not tied to the production of a specific crop. AMTA payments were intended to compensate farmers in shifting from commodity-specific programs to a system based on income payments only. In the 2002 farm bill, the AMTA payments were replaced with fixed direct income payments. Finally, the FSRIA established new farm programs for commodities not

¹ As explained below, domestic support programs distorting agricultural production and trade fall under the amber box, as agreed upon by the Agriculture Agreement of the Uruguay Round of trade negotiations. Although subject to specified limits, WTO members generally committed to reducing amber box subsidies. The Total Aggregate Measurements of Support (Total AMS) represents these nations’ commitments to reduce such subsidies to their own agricultural producers, and is expressed as a single amount of money which enables making comparisons across countries.

previously included in farm bills, revived earlier programs, and modified existing programs for relatively minor agricultural commodities.

Throughout its history, government involvement in agriculture has generated public debate, so farm bill reauthorization processes are anticipated with much anxiety in agricultural circles. The discussions surrounding the 2007 farm bill are taking place in an increasingly difficult economic environment, even by historical standards. Partly due to the range of interests represented in the omnibus farm bills, the debate about farm income support and related policies has expanded and increased in intensity over the past two decades. Forces such as globalization, the drive towards efficiency improvements using market-based approaches, complying with international trade agreements, and concern about agriculture's influence on the environment and sustainability are increasingly influencing current policy discussions. Equally important in the policy debate are structural transformations in agriculture, which have led to fewer farms and reduced numbers of people directly involved in food production.

National Budget Considerations

Current national U.S. budgetary conditions are not amenable to large increases in expenditures not involving emergencies, strictly necessary programs, or previous commitments, such as those associated with the wars in Afghanistan and Iraq, disaster relief, and fulfilling debt payment obligations. Projections conducted by the Congressional Budget Office (CBO) (2007b) suggest that if current policies and laws are kept in place, the 2007 federal budget deficit will amount to \$158 billion, or 1.2 percent of the nation's gross national product (GDP). Adding spending increases associated with military activities in Iraq and Afghanistan would result in a larger federal budget deficit.

Based on the assumption that current laws and policies would remain unchanged, projections further indicate a small decrease in budget shortfalls through 2008, followed by a budget deficit increase to about 1.5 percent of GDP for 2009 and 2010, and again followed by slight surpluses until 2017. Mandatory expenditures, such as Social Security, Medicare and Medicaid are expected to increase by 5.9 percent between 2008 and 2017, and exceed the projected nominal GDP growth rate of 4.6 percent per year over the same period. Mandatory programs also include the 2002 farm bill programs that most directly affect the farm sector, including commodity programs, conservation programs, and programs enhancing agricultural trade. Other important mandatory programs included in the 2002 farm bill are nutrition programs, farm credit programs, and energy programs.

Discretionary expenditures are projected to increase by two percent per year, well below the average U.S. economic growth rate of 4.3 percent over the past two decades (Congressional Budget Office, 2007b). Discretionary programs include agricultural research and Extension, statistical and economic data collection and analyses, plants and livestock inspections, agricultural marketing, and various types of international food aid. The combined total outlays on mandatory (those mandated by law) and discretionary (determined by annual appropriation acts) agricultural programs were \$26.0 billion in 2006, just below the previous years agricultural outlays of \$26.6 billion, which was the largest amount since 2000, and about twice as much as was spent on agriculture in 2004 (Congressional Budget Office, 2007).

Baseline projections of the Congressional Budget Office (2007c) indicate that the U.S. federal government's budget trends are not sustainable in the future. The combined expenditures on the three large social programs – Medicare, Medicare, and Social Security – would exceed ten percent of GDP by the middle 2010s and would be 20 percent of GDP by 2050 if current policies would remain unchanged. While not immediately urgent, the increased mandatory expenditures

on the three large social programs will increasingly create pressures on less essential programs in the future. As pointed out by Hull, critical needs and competing budget demands may translate into declining political support for production agriculture in the future. Further, Mercier and Smith suggest that recent budget have been successful in reducing spending on agricultural programs, providing an impetus to additional funding reductions in the future.

Agricultural Policy Reforms under the Uruguay Round

In the past, international trade agreements have often been used to facilitate a reduction in trade-distorting domestic support policies. International efforts to reduce trade obstacles date back to the 1930s, after record-high protectionist policies across the globe and following U.S. passage of the Smoot-Hawley Tariff Act of 1930. Initially, the U.S. sought to cut tariffs on its imports through bilateral negotiations with other nations. The trade talks were broadened shortly after World War II, when the country also engaged in multilateral trade negotiations within the framework of the General Agreement on Tariffs and Trade (GATT).

The various rounds of trade negotiations helped liberalize trade in most nonagricultural goods, but trade barriers on agricultural goods remained relatively high until the Uruguay Round. The Uruguay Round Agreement on Agriculture (URAA) provides a framework for a long-term move towards agricultural trade liberalization and domestic policy reform (Kennedy, et al.).

Table 1 summarizes the three main provisions of the URAA and their agreed implementation periods, including market access, domestic support policies, and export subsidies. First, the market access provision is aimed at opening markets by reducing barriers to agricultural trade and by increasing market transparency. Further, members committed to convert non-tariff barriers to simple tariffs or to tariff rate quotas (TRQs). Members also agreed to reduce

the over-quota tariffs and simple tariffs over a predefined implementation period (Burfisher, pp. 1-3).

The second important URAA provision pertains to domestic agricultural support policies. Developed countries agreed to keep the total value of trade-distorting domestic supports made to agricultural producers below maximum amounts, based on their level of trade-distorting domestic support during a base period from 1986 to 1988. Maximum payments values were gradually lowered from 97 percent of the 1986-88 base levels in 1995, to 80 percent in 2000. The annual amounts of support, or aggregate measurements of support (AMS), are calculated as the sum of trade-distorting farm program benefits. The AMS benefits include both direct government payments not tied to a particular commodity, and commodity-specific price supports coupled to current production levels, price levels, or resource or inputs usage.

The URAA allowed for making exceptions for certain program categories under the *de minimis rule*. In particular, total AMS benefits include specific commodity supports only if the financial assistance equals more than five percent of the commodity's production value. Similarly, noncommodity-specific supports are also exempted from inclusion in total AMS benefits, as long as they do not exceed five percent of the total agricultural output value.

The third important URAA provision pertains to export subsidies, which have long been a source of contention in international trade discussions. Similar to AMS, the URAA required all countries to report, reduce, and set legal upper limits on their export subsidies. As a consequence, the number of countries using export subsidies has declined in recent years. Also, total export subsidies expenditures among the combined WTO membership fell from \$5.4 billion in 1998 (the latest year for which export subsidy data are available) to an estimated \$3 billion or less worldwide in 2005 (Panagariya).

The URAA distinguishes domestic support policies by their effects on production and trade (Table 2). First, the “amber box” includes domestic programs directly subsidizing production and thus influencing production decisions. These programs are included in calculating the AMS benefits and are therefore subject to reductions, as described above. Second, domestic farm programs meeting established criteria for causing only minimal trade distortions are included in the “green box” and are exempted from any expenditure reductions. Finally, farm subsidies linked to supply limitations are included in the “blue box” and are thus exempted from any expenditure limits.

Estimates of the economic impact of the Uruguay Round in general vary, but the most widely cited estimate suggests that full implementation of the agreement would raise world income by one percent per year in real terms (Krugman and Obstfeld, p. 230). A specific benefit of the URAA is that it has helped increase agricultural policy transparency, in part because nations agreed to notify the WTO on their current support levels.

In spite of the increased transparency, the URAA has had limited success in reducing the total support level for agriculture in developed countries (Kennedy, et al.). In comparison to other industries, agricultural product supports remain high. Another shortcoming of the URAA is that many trade problems of developing countries have not been adequately addressed (Salvatore, pp. 303-304). Further, the extent to which the URAA has been effective in reducing domestic support has been somewhat limited (Kennedy, et al.). Several countries have been able to meet their URAA obligations by shifting support from the non-exempt (amber box) to the exempt (blue or green box) categories. Also, by committing themselves to reducing their total AMS benefits, WTO member nations have been able to trim down their support for some products, while maintaining funding for other products at high levels. In addition, member

nations have utilized the *de minimis* provisions to their advantage, allowing the potential for continued high levels of support for the production of selected commodities.

Agricultural Trade Policy Negotiations under the Doha Round

The multilateral trade negotiations as part of the Doha round have been even more contentious than those of earlier rounds. At the time of writing, the member nations have been unable to reach a final agreement. Vanzetti and Peters divide the proposals of the various nations into three distinct categories. The U.S., supported by the Cairns group of agricultural exporters, is pressing for substantial agricultural trade liberalization. The EU, along with Japan, Korea, Switzerland and Norway, argues for a more conservative approach. Further, developing countries are pressing development issues much more vigorously than in the past, following the absence of substantial benefits flowing to developing countries after implementation of the Uruguay Round reforms.

Vanzetti and Peters also identify five key issues in the Doha Development Round involving agriculture, including market access, domestic support, export subsidies, special and differential treatment, and non-trade concerns. These five elements are briefly outlined in the discussion below, drawing heavily on the discussion by the same authors.

1. Market Access. Although tariffs remain relatively high for many agricultural products, WTO members have legally bound themselves to maximum tariffs. The simple average of bound tariff rates of agricultural products in developed and developing countries is 51 percent, and the average of the actually applied tariff rate is about 48 percent. For developing countries, the average applied tariff rate on agricultural products is 26 percent, but tariffs on individual products may be as high as 300 percent. Generally, bound rates are much higher than applied rates, particularly for developing nations. The Uruguay Round also established a two-tier tariff system, mostly used by the developed countries with a highly protected agriculture to shelter

their sensitive products from low-cost imports. Under a two-tier tariff system, imports are taxed at a relatively low rate until reaching a predefined quantity, and those exceeding the quota are taxed at a relatively high rate.

The U.S. has proposed a reduction in applied tariffs according to a harmonizing Swiss Formula, which entails reducing high tariffs more than proportionately (U.S. Department of Agriculture). The U.S. also proposed to eliminate in-quota tariffs for TRQs, and to expand import quotas by 20 percent. Thus, U.S. proposal would apply the greatest cuts in the most trade-distorting tariffs, and place the focus on applied rather than bound tariffs. In practice, the application of a single harmonizing formula would require developing countries to make proportionately large cuts, because average tariff rates on agricultural products among developing nations are higher than those among developed nations. The U.S. proposal does not specifically recognize special and differentiated treatment for developing countries.

The EU proposal for market access is a continuation of the Uruguay Round approach. In particular, the EU proposed a reduction in bound tariff rates by an average of 36 percent, but with a minimum of 15 percent for an individual tariff line.

2. *Domestic Support.* Despite their declared intent to lower support for agriculture, many developed WTO member nations maintain relatively high domestic agricultural products support levels. During 2000, the combined support for agricultural production among Organization for Economic Cooperation and Development (OECD) member nations amounted to \$323 billion, whereas the total farm gate value of agricultural products was \$632 billion. That is, one-third of every dollar received by agricultural producers in OECD countries is attributed to government assistance. The major beneficiaries of these domestic supports were farmers in the EU, followed by those in the U.S. and Japan. About one-half of subsidies are borne by consumers, and the remainder by taxpayers.

Most developing countries are unable to afford such high levels of domestic support. However, agricultural producers in developing nations are affected by the domestic support for the agricultural sector in developed countries, because the supports stimulate domestic food production, force down world commodity prices, and benefit consumers at the expense of producers in food importing nations that do not provide such supports.

Recently, commodity support levels declined due to high world market prices for many agricultural commodities. The high prices may keep sustained over the next decade, because they are not only due to temporary factors such as crop shortfalls associated with drought and low stocks, but also the result of structural changes including increased feedstock demand for biofuel production, and surplus reduction due to past policy reforms (Organization for Economic Co-operation and Development, 2007).

The U.S. proposal with regard to domestic supports includes a reduction over a five-year period in non-exempt (amber box) and production-limiting (blue box) support to at most five percent of the agricultural production value in the 1996-98 base period. The proposal suggests eliminating all non-exempt domestic support in the future and allowing developing countries to provide additional support to facilitate development and food security.

The EU proposal includes maintaining the blue and green boxes, and reducing amber box payments by 55 percent. The EU proposal would expand the green box criteria to encompass non-trade concerns such as rural development and animal welfare (see item 5 below). The proposal also would eliminate the *de minimis* provision for developing countries.

3. *Export Subsidies.* The U.S. has proposed eliminating all export subsidies over five years. Without setting specific quantitative limits, the U.S. proposal also restrict the use of export credits, food aid, and other forms of export support. In contrast, the EU has proposed a more modest reduction in export supports by an average of 45 percent. Similar to tariff reductions,

setting average limits on export supports provides nations with flexibility, by permitting large cuts in some lightly traded or lightly protected products, while maintaining strong financial support for commonly exported products. The EU has also proposed to identify trade distorting elements of export credits for agricultural products, and subject them to strict disciplines.

4. Special and differential treatment. To ensure that all countries benefit from world trade expansion, the proposals contain special provisions for developing countries. The EU proposed accepting all imports duty free from a group of least developed countries, and receiving 50 percent of imports from developing countries overall without trade barriers. The EU itself already meets this criterion. Furthermore, the EU called for developing countries to be permitted a reduction in commitments in moving toward free trade, in case their own food security and other multifunctional objectives need to be met. The US did not make a concrete offer concerning special and differentiating treatment for developing nations, but has remained open to modify the agreed terms and conditions regarding exports from developing countries and to provide exceptions to meet emergency situations.

5. Non-trade concerns. The agricultural negotiations may provide an opportunity for governments to pursue certain non-trade issues such as those relating to the environment, rural development, labor standards, and food security. In trade negotiations, the U.S. favors focusing only on issues that are directly relevant to international trade. In contrast, the EU proposal supports setting specific social goals, such as protecting the environment, protecting traditional landscapes, enhancing rural development and protecting animal welfare.

The Need for an International Trade Agreement

Anderson and Martin suggest that the accomplishments of the URAA provide an opportunity for additional achievements as part of the DDR and beyond. However, while the three pillars of

URAA provide a basis for further negotiations, the development of a suitable framework for the DDR – the July (2004) Framework Agreement – took more than three years. The framework addressed the three pillars of the existing URAA (domestic support, export competition, and market access), and introduced other headings, such as those dealing with least-developed countries, new WTO members, and monitoring and surveillance.

At the time of writing, the DDR appears to be stalled and may never have a successful conclusion. Huffbauer and Pischedda argue that the heavy emphasis on agricultural trade liberalization contributed to failed DDR discussions. While the emphasis on agriculture may be justified from an economic perspective – due to limited agricultural trade liberalization progress in previous rounds, and also because developing nations would stand to gain considerably from subsidy reductions among developed nations and market access – political obstacles proved difficult to overcome. In particular, due to the capitalization of farm programs in land values, the EU, the US, and Japan were unwilling to reduce their domestic agricultural support. Further, with the exception of Brazil and Argentina, developing nations were unwilling to agree to market access from abroad. In addition, without Trade Promotion Authority – granting the U.S. president the right to negotiate trade agreements independent of congressional oversight, and which expired at the end of July 2007 – the negotiating power in trade discussions is limited.

Huffbauer and Pischedda outline three scenarios that appear to be unfolding in the absence of an impending DDR agreement. First, a very weak Doha agreement might eventually erode the effectiveness of the WTO, leading members to advance their own interests at the expense of other member nation by advancing the litigation function of the WTO. Such an outcome would likely lead to additional protectionist actions such as intensified sanitary and phytosanitary measures. A second scenario would be the successful creation of a Free Trade Area of the Asia Pacific (FTAAP). The addition of a powerful trade block might either inspire

the other regional trade block to become more cooperative or antagonistic in its international trade relationships. A third scenario would involve an increase in bilateral or small regional trade agreements. Such agreements would complicate trade liberalization efforts and would likely serve to undermine the WTO.

Neither the current DDR stalemate, nor any of the three scenarios or a combination thereof outlined above is conducive to efforts to develop a 2007 farm bill that significantly alters the role of the federal government in U.S. agriculture. Further, the political realities associated with an approaching election year are expected to limit the desire among legislators for agricultural reform. In addition, as outlined earlier, farm legislation must be in place at the latest before the 2008 crop harvest to avoid reverting to permanent farm legislation. The combination of these factors suggests that the likelihood of the successful development of a farm bill that includes substantive elements of reform is rapidly diminishing. Instead, Congress may either extend the current farm bill for some time, or pass farm legislation similar to the 2002 farm bill, adjusted for current and short-term future agricultural production and marketing conditions and election year constituent demands.

It appears that a unique window of opportunity for reducing the role of the federal government in agriculture will soon be closed. While historically high commodity prices have momentarily reduced the need for high federal commodity support and provided an opportunity to develop a farm bill that would de-emphasize the role of government in production agriculture, increasing production costs associated with high energy prices and asset capitalization are expected to lead to calls for further government program support for agriculture in the future.

Concluding Comments

At the current time, it remains uncertain whether a domestic U.S. farm bill will be developed in 2007. Although domestic discussions surrounding the new farm bill are on schedule, the final outcome of the discussions remains highly uncertain. This is particularly true in light of the difficult national budget conditions, intense media scrutiny, increased public awareness that the farm program objectives have not always been attained, and calls from developing nations to reform domestic policies of developed nations.

While it is impossible to predict the final outcome of the ongoing farm policy debate leading up to the development of new farm legislation, at present, the most likely outcome appears to be a continued delay in the development of an entirely new farm bill, in anticipating of a successful conclusion of the WTO trade negotiations. An agreement on the Doha Round of trade negotiations would enable U.S. legislators to avoid having to make politically unpopular decisions involved with reforming domestic farm policies. Instead, a trade agreement at the conclusion of the Doha Round of trade negotiations would be portrayed as the responsibility of the Office of the United States Trade Representative – at the behest of the Executive and Legislative branches of the U.S. government – and the foreign trade partners. That is, Congressional Representatives might be able to avoid political consequences associated with the development of potentially unpopular farm program legislation.

Until recently, the positions of the three main groups of nations involved in the international trade negotiations failed to converge. However, at the current time, there is an increased will among political leaders in the EU to reach a trade agreement with US. If a potential US-EU trade agreement is reached as part of a successful conclusion of the Doha Round of trade negotiation in 2007, a likely outcome will be a new Farm Bill. In the absence of a

Doha Round agreement in 2007, U.S. legislators will likely develop a one or two-year extension of the 2002 farm bill.

References

- Anderson, Kym, and Will Martin. 2005. "Agricultural Trade Reform and the Doha Development Agenda." World Bank Policy Research Working Paper 3607, May. <http://ideas.repec.org/p/wbk/wbrwps/3607.html>
- Burfisher, Mary E. (Ed.). 2001. "The Road Ahead: Agricultural Reform in the WTO – Summary Report." Market and Trade Economics Division, Economic Research Service, U.S. Department of Agriculture, Agricultural Economic Report No. 797. <http://www.ers.usda.gov/publications/aer797/aer797.pdf>
- Cain, Zachary, and Stephen Lovejoy. 2004. "History and Outlook for Farm Bill Conservation Programs. *Choices*, 4th Quarter: 37-42. <http://www.choicesmagazine.org/2004-4/policy/2004-4-09.pdf>
- Cochrane, Willard W. 1993. *The Development of American Agriculture: a Historical Analysis*. Second Edition. Minneapolis: University of Minnesota Press.
- Congressional Budget Office. 2007a. *Budget Options: 350 – Agriculture*. Congress of the United States, February. <http://www.cbo.gov/ftpdoc.cfm?index=7821&type=1>
- Congressional Budget Office. 2007b. *The Budget and Economic Outlook: Fiscal Years 2008 to 2017*. Congress of the United States, January. <http://www.cbo.gov/ftpdoc.cfm?index=7731&type=1>
- Congressional Budget Office. 2007c. *The Budget and Economic Outlook: An Update*. Congress of the United States, August. <http://www.cbo.gov/ftpdoc.cfm?index=8565&type=1>
- Doering, Otto, and Joe L. Outlaw. 2006. "The Evolution of the Rationale for Government Involvement in Agriculture." *Choices* 21(4): 221. 224. <http://www.choicesmagazine.org/2006-4/resource/2006-4-03.htm>
- Effland, Anne B. W. 2000. "U.S. Farm Policy: The First 200 Years." *Agricultural Outlook*, March 21-25. <http://www.ers.usda.gov/publications/agoutlook/mar2000/ao269g.pdf>
- Fergusson, Ian F. 2007. "World Trade Organization Negotiations: The Doha Development Agenda." Congressional Research Service Report for Congress, Updated August 21. <http://www.nationalaglawcenter.org/assets/crs/RL32060.pdf>
- Hufbauer, Gary, and Costantino Pischedda. 2007. "After Doha: Evolution or Revolution in the World Trading System?" Canadian Agricultural Trade Policy Research Network Commissioned Paper CP 2007-1, February. http://www.uoguelph.ca/~catprn/PDF/Commissioned_Paper_2007-1_Hufbauer.pdf
- Hull, Jonathan Watts. 2006. "The 2007 Farm Bill in Context." Southern Legislative Conference of The Council of State Governments. http://www.slatlanta.org/Publications/AgRD/2007_farm_bill_in_context.pdf
- Kennedy, P. Lynn, Lars Brink, John Dyck, and Donald Maclaren. 2001. "Domestic Support: Issues and Option in the Agricultural Negotiations." International Agricultural Trade Research Consortium, Commissioned Paper No. 16. http://www.nuca.ie.ufrj.br/infosucro/biblioteca/negociacoes/Kennedy_domestic.pdf

Knutson, R., J. B. Penn, and B. L. Flinchbaugh. 2003. *Agricultural and Food Policy*, Fifth Edition, Prentice-Hall, Inc.

Koo, Won W., Jeremy W. Mattson, and Richard D. Taylor. 2004. "Potential Effects of the WTO Framework Agreement on U.S. Agriculture." Center for Agricultural Policy and Trade Studies, North Dakota State University, September. <http://www.ag.ndsu.nodak.edu/capts/documents/AgPolicyBrief04-2.pdf>

Krugman, Paul R. and Maurice Obstfeld. 2006. *International Economics, Theory and Policy*, 7th Edition, New York, Pearson Addison Wesley.

Mercier, Stephanie, and Vince Smith. 2007. "Domestic Farm Policy for 2007: Forces for Change." *Choices* 21(4): 209-214. <http://www.choicesmagazine.org/2006-4/resource/2006-4-01.htm>

Organization for Economic Co-operation and Development. 2007. "OECD-FAO Agricultural Outlook 2007-2016." <http://www.oecd.org/dataoecd/6/10/38893266.pdf>

Panagariya, Arvind. 2005. "Liberalizing Agriculture." *Foreign Affairs* - WTO Special Edition, December. <http://www.foreignaffairs.org/20051201faessay84706/arvind-panagariya/liberalizing-agriculture.html>

Pugel, Thomas A. 2006. *International Economics*, 13th Edition. New York: McGraw-Hill Irwin.

Salvatore, Dominick. 2004. *International Economics*, 8th Edition, John Wiley & Sons, Inc.

Thompson, Robert L. 2005. "The 2007 U.S. Farm Bill and the WTO Negotiations." Agricultural and Applied Economics Seminar Series, September. http://naamic.tamu.edu/sanantonio/agrifood_regulatory_and_policy_integration_under_stress.pdf

Thompson, Robert L. 2006. "The Next Farm Bill." In Karen M. Huff, Karl D. Meilke, Ronald D. Knutson, Rene F. Ochoa, and James Rude (eds.). *Agri-food Regulatory and Policy Integration Under Stress*. Texas A&M University, University of Guelph, and Inter-American Institute for Cooperation in Agriculture-Mexico. http://naamic.tamu.edu/sanantonio/agrifood_regulatory_and_policy_integration_under_stress.pdf

United States Department of Agriculture. 2005. "U.S. Proposal for Global Agricultural Trade Reform, Actual Language of U.S. WTO Agriculture, Proposal Presented at Geneva, Washington, <http://www.fas.usda.gov/itp/wto/actual.htm> Accessed October 15, 2007.

Vanzetti, David, and Ralf Peters. 2003. "Making Sense of Agricultural Trade Policy Reforms." Paper presented at the 25th International Conference of International Association of Agricultural Economics, Durban, South Africa, August 16-22. http://192.91.247.38/tab/atpsmres/VP_IAAE03.pdf

Westcott, Paul C., C. Edwin Young, and J. Michael Price. 2002. "The 2002 Farm Act: Provisions and Implications for Commodity Markets," USDA, Economic Research Service, Agriculture Information Bulletin no. 778, November. <http://www.ers.usda.gov/publications/aib778/aib778.pdf>

Womach, Jasper. "Possible Expiration of the 2002 Farm Bill". Congressional Research Service Report Number RL34154, Updated September 10, 2007. <http://opencrs.cdt.org/getfile.php?rid=61268>

World Trade Organization. "Dispute settlement." Web Page. http://www.wto.org/english/tratop_e/dispu_e/dispu_e.htm Accessed October 15, 2007.

Table-1. Main Provisions of the Uruguay Round Agreement on Agriculture

Negotiated Reduction	Implementation Period	
	Developed countries (1995-2000)	Developing countries (1995-2004)
Market access	Percent	Percent
Average tariff cuts for all agricultural products	-36	-24
Minimum tariff cuts per product	-15	-10
Domestic support		
Total cuts in aggregate measurement of support	-20	-13
Export subsidies		
Value cut	-36	-24
Volume cut	-21	-14

Least developed countries were required to bind their tariffs but are exempt from reduction commitments

Source: Burfisher, p. 2.

Table-2. Treatment of domestic agricultural support in the Uruguay Round Agreement on Agriculture

Category	General Criteria	Examples of Policies
Exempt support (green box)	Measures must be financed by government rather than consumers and must not provide price support to producers Specific criteria for general government services, public stockholding, domestic food aid, direct payments, and other programs	Direct payments to farmers that do not depend on current production decisions or prices; disaster assistance; government programs on research, extension, and pest and disease control
Exempt direct payments (blue box)	Direct payments under production-limiting programs must be based on a fixed area or yields, and cover 85 percent or less of the base production level or head of livestock	Direct payments to producers, linked to the production of specific crops, but which impose offsetting limits on output
Nonexempt support (amber box)	Market price supports, nonexempt direct payments and any other subsidies not specifically exempted are subject to reduction commitments	Market price support programs, and output subsidies

Source: Burfisher, p. 3.