
NEWSLETTER

Issue 07-4

August 2007

Analysis of the U.S. House of Representatives' Farm Bill

Won W. Koo and Richard D. Taylor

The Agricultural Committee of the U.S. House of Representatives released a proposal for the 2007 farm bill that was approved by the U.S. House. The House bill is similar to the 2002 farm bill except it provides higher loan rates and target prices for selected commodities. Additional funding has been included in the energy title for renewable and alternative sources of energy. The North Dakota Representative Farm Model, which is operational at the Center for Agricultural Policy and Trade Studies, North Dakota State University, was updated and used to estimate changes in net farm income under the House bill. The model analyzes the effects of the House bill on net farm income for three different farms: the high-profit farm, average-profit farm, and low-profit farm.

The House bill provides higher net farm income than the current farm bill. Net farm income for the high-profit farm increases 11% under the House bill compared to the current farm bill. Average net farm income for the high-profit farm would be \$117,285 in 2008 and 129,329 in 2012 under the House bill. For the average-profit farm, net farm income would increase 15% under the House bill compared to the current farm bill. Net farm income would average \$54,330 in 2008 and \$65,074 in 2012 for the average-profit farm. Average net farm income for the low-profit farm would be negative under the current farm bill and slightly positive under the House bill in 2008. It would be \$14,473 in 2012.

Government support under the House bill would increase \$4.41 per acre for the high-profit farm, \$4.07 per acre for the average-profit farm, and \$3.79 per acre for the low-profit farm, compared to the 2002 farm bill. Higher support for the high-profit farm may be due mainly to higher yields or increased base acres, resulting in additional loan deficiency income. The House bill would provide about \$70 million additional federal dollars per year to North Dakota. The House bill would also provide better protection from price uncertainty. The probability of negative net farm income for high- and average-profit farms would decrease from 9% under the current farm bill to 3% under the House bill, and for the low-profit farm it would decrease from 53% to 45%.

U.S. farm policy has been challenged by many countries through the WTO negotiations. The negotiations have stalled, but if they progress, the amber box payments may become the target for reduction. On the other hand, commodity prices have become more volatile with the gradual progression of globalization. Under increased price uncertainty, along with fluctuation of yields due to weather, producers need revenue protection, which would be compliant under the WTO. Thus, there are a few areas of concern related to the proposed farm bill.

First, increases in target prices and loan rates for selected commodities may be beneficial for protecting farm income when market prices of the crops move below the loan and target prices. However, these changes would increase the U.S. amber box payments under the WTO and provide ammunition to other countries attacking the U.S. farm subsidies. One of the alternatives may be an increase in direct payments. However, these payments are bid quickly into land prices, transferring most of the benefits to land owners. Another alternative is to enhance net farm income through production of cellulosic ethanol from biomass from CRP land, wheat straw, and corn stover. The new farm bill should allow for farmers to harvest biomass from CRP land and provide some incentive payment for harvesting not only biomass from CRP land but also wheat straw and corn stover. This would not only increase farm income but also decrease dependence on foreign oil.

Second, the House bill provides producers the option to choose either counter-cyclical payments based on market price or revenue-based counter cyclical payments based on national yield and price. This option as proposed

would be a one-time choice for the life of the bill and would be by crop. The price-based counter cyclical payments protect producers from decreases in market prices below the effective target prices but do not provide a safety net for income loss resulting from low yield. On the other hand, the revenue-based counter-cyclical payments, similar to the USDA's proposal, would protect producers from both low prices and low yields. The House bill proposes using the five-year Olympic average national commodity yield to calculate the target revenue. However, using the national average yield to calculate the target revenue may not represent regional production conditions. Using county or state average yield instead of national average yield could represent regional production conditions in calculating the target revenue. Therefore, the revenue-based counter-cyclical payments using county or state average yield would provide better protection from price and yield uncertainty, but would not necessarily provide high income for producers.

Third, the new farm bill should include a more restrictive payment limitation scheme which would address the small number of very large payments made to individuals. Our analysis indicates that a small number of U.S. farms would be impacted by the steep payment limitation such as a net income of \$500,000 per farm.

(For more details, see the forthcoming Agricultural Policy Brief No. 15)

Outlook for the U.S. and World Wheat Industries, 2006-2016

Richard D. Taylor and Won W. Koo

This article summarizes the U.S. and world wheat industries for the 2006-2016 period using the Global Wheat Policy Simulation Model operational at North Dakota State University. The outlook projection is based on an assumption that current farm and trade policies will not change. Total world wheat trade for the five major exporters is projected to increase 13.2% from 68.4 million metric tons (mmt) in 2006 to 77.4 mmt in 2016. Common wheat production is predicted to increase in Australia faster than in other countries, although most of the increase is due to Australia returning to normal production, and durum wheat production is predicted to increase in Canada faster than in other durum producing countries.

By 2016, total U.S. wheat production is expected to grow 2.7% above the 2004-2006 average, but will still be much lower than production during the late 1990s. The largest increases in production occur for U.S. hard red winter (HRW) wheat (14.4%), followed by durum wheat (12.1%) and hard red spring (HRS) wheat (4.3%). Production of white wheat is expected to decrease 17.5%. U.S. durum exports are projected to increase from 104 thousand metric tons in 2004-2006 to 520 thousand metric tons in 2016. Common wheat exports are predicted to decrease from 25.8 mmt in 2004-2006 to 20.2 mmt in 2016, although a continued weak dollar may increase exports slightly.

Asian imports of wheat, excluding India, are projected to decrease 17.6% between the 2004-2006 average and 2016. The main reason for the decrease in Asian imports is the 52% decrease of imports by China. China has been a net importer of wheat during the past three years, but it is predicted to decrease its imports to 1.6 million metric tons by 2016. Imports by Japan, Korea, and Taiwan are projected to decrease 6.7%, 6.8%, and 1.5%, respectively, over the 2006-2016 period.

North African imports of wheat are projected to increase 11.7% from the 2004-2006 average to 2016. Egyptian imports of common wheat are projected to increase 12.4%, from 7.6 mmt to 8.6 mmt. Algerian imports of common wheat are projected to increase 18.0% from 3.0 mmt to 3.6 mmt, and durum wheat imports are projected to increase 8.7%, from 2.2 mmt to 2.4 mmt. Tunisian imports of common wheat are projected to increase 17.7%, from 0.60 mmt to 0.71 mmt, and its durum wheat imports are projected to increase 13.4%. This clearly indicates that the African wheat market will grow faster than the Asian market for the next ten years and become an important market for the U.S. wheat industry.

The Latin American wheat market will also grow faster than the Asian market and the African market. Latin America is an important market for the U.S. wheat industry, but the U.S. must compete with Argentina to maintain or capture market share in the region. Mexican imports are projected to increase 20.8% from the 2004-2006 average of 3.1 mmt to 3.8 mmt by 2016. Venezuela is expected to increase common wheat imports by 26.6%, from 1.2 mmt to 1.5 mmt, and durum wheat imports by 44.9%. Brazilian imports are projected to increase to 7.4 mmt by 2016, which is a 22.1% increase above the 2004-2006 average.

Import demand for both common and durum wheat is largely based on optimistic income growth (2.5% to 6% annually) in both developing and developed countries, which was provided by Global Insight. However, if the predicted income growth is not realized, import demand could grow slower than predicted and estimated prices could be lower.

Prices for both common wheat and durum wheat are predicted to be lower than the 2006 levels, decreasing gradually until 2009 and then remaining level. Prices were higher in 2006 than in 2005 due to the small crop in Australia and the influence of increased corn ethanol demand in the United States. It is expected that the average price of wheat will return to \$4.50-\$4.60 range for HRS wheat and \$5.00-\$5.20 range for durum wheat. Durum wheat trade is expected to grow at a faster rate than common wheat trade. In the past, Asia had been the growth market for wheat exports, but the African market is now predicted to have the highest growth rate. Per capita consumption of wheat has increased in Asian countries, but it reached a peak level. As a result, wheat imports for those countries could increase very slowly or decrease slightly. Wheat imports should increase in Latin America, but most of those will be supplied by Argentina. Competition among wheat exporting countries in the markets will remain strong: The United States will compete with Canada and the EU in the African market, with Canada and Argentina in the Latin American market, and with Canada and Australia in the Asian market.

(For more details, see the forthcoming Agribusiness & Applied Economics Report)

Outlook for the U.S. and World Sugar Markets, 2006-2016

Richard D. Taylor and Won W. Koo

This report summarizes the U.S. and world sugar industry for 2006-2016 using the Global Sugar Policy Simulation Model operational at North Dakota State University. The outlook projection is based on an assumption that farm and trade policies remain unchanged. Total world sugar trade is projected to increase 16.7%, from 30.0 to 35.0 million metric tons (mmt) over the 2006-2016 period. Exports of sugar in most countries will increase over the 2006-2016 period. Exports will increase 28.0% for Thailand and 18.0% for Australia.

During late 2005 and the first quarter of 2006, the world sugar price increased from about \$0.12/lb to over \$0.18/lb because of increased use of sugarcane for ethanol production in Brazil, but then it fell to \$0.12/lb in late 2006 and \$0.11/lb by early 2007. The world sugar price, referred to as the Caribbean price of sugar, is projected to decrease about 2% from 15.50 cents/lb in 2006 to 15.25 cents/lb in 2016 because the substantial diversion of sugar cane to ethanol production is offset by increases in production in most countries except the EU. The EU has changed the internal sugar policy restricting support, which has reduced production. Because of that change, the EU has become a net importer of sugar. EU imports are predicted to increase from 2.2 mmt in 2006 to 3.1 mmt in 2016. Sugar production in the EU is predicted to decrease 23.1%.

U.S. sugar production is predicted to increase to 8.6 mmt in 2016. The increase in sugar production is due mainly to a combination of higher world sugar price and increases in consumption. U.S. sugar consumption is predicted to increase 12.0% from 8.3 mmt (the 2004-2006 average) to 9.3 mmt in 2016. Imports are predicted to decrease 18% from the 2004-06 average. However, U.S. imports depend upon Mexico's sugar production and consumption. Mexico's production is predicted to increase 14.6% from 5.7 mmt in 2004-2006 to 6.5 mmt in 2016. Mexico is expected to export 416 thousand metric tons by 2016, mainly to the United States. Sugar consumption is predicted to increase 14.9% from 5.3 mmt to 6.1 mmt in 2016, under the assumption that Mexico does not convert to high fructose corn syrup (HFCS) in their soft drink industry. If Mexico replaces the sugar that is used in soft drinks with HFCS, the excess sugar will likely be exported to the United States under NAFTA.

Brazil's production is predicted to increase 21.5% from the 2004-2006 average of 28.9 mmt to 35.1 mmt in 2016. Brazil's exports are predicted to increase from 18.4 mmt to 22.9 mmt over that period, while its domestic consumption is projected to increase 14.2% from 10.7 mmt to 12.2 mmt. Much of the increase in consumption is due to ethanol production.

The former Soviet Union (FSU) is the largest importer, followed by Indonesia and India. The FSU's production is predicted to increase 28.3% from 2.6 mmt to 3.4 mmt in 2016, and consumption is predicted to increase 6.2%,

North Dakota State University
Dept. of Agribusiness & Applied Economics
P.O. Box 5636
Fargo, ND 58105-5636

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from 5.9 mmt to 6.2 mmt, for the same period. Imports are predicted to decrease 11.8% from the 2004-2006 average. China is expected to increase its imports about 104.4% from 0.9 mmt in 2004-2006 to 1.8 mmt in 2016. China's production is predicted to increase 21.3% from 11.0 mmt to 13.3 mmt in 2016, and consumption is predicted to increase 30.8% from 11.5 mmt to 15.1 mmt for the period. India's production is predicted to increase 28.2% from 20.9 mmt to 26.8 mmt in 2016. However, India is predicted to import 2.3 million metric tons of sugar by 2016 mainly because of higher consumption.

(For more details, see the forthcoming Agribusiness & Applied Economics Report)

Recent Publications

Longer-Term Forecasting of Grain Flows and Delay Costs on the Mississippi River, by William W. Wilson, Eric A. DeVuyst, Richard D. Taylor, Bruce L. Dahl, and Won W. Koo, Agribusiness and Applied Economics Report No. 598, April 2007.

Grain Shipments on the Mississippi River System: A Long-Term Projection, by William W. Wilson, Bruce L. Dahl, Richard D. Taylor, and Won W. Koo, Agribusiness and Applied Economics Report No. 605, July 2007.

Determinants of the U.S. Trade Balance in Consumer-Oriented Agricultural Products, by Renan Zhuang, Won W. Koo, and Jeremy W. Mattson, Agribusiness and Applied Economics Report No. 607, July 2007.

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