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Market Access under the World Trade Organization: Identifying Sensitive Agricultural Products in the EU

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Abstract

The WTO negotiations dragged on for over seven years because of the divergent interests of the WTO members. Even among the developed countries, the United States (US) has different interests compared to the European Union (EU). The US is aggressively demanding for significant reduction in tariffs. Compared to the US, the EU is unable to lower its tariffs drastically because further tariff reductions will erode border protection for some of its important agricultural products.

In this study, EU agricultural products are examined by tariff lines at eight digit level to reveal the sensitive agricultural products in the EU. These products are butter, skim milk powder, beef meat, poultry meat, pig meat, white sugar, wheat, barley, and maize. A spreadsheet model is used as an analysis tool to complement the various modelling approaches in identifying the sensitive agricultural products of the EU. The spreadsheet projection model is a simple forecasting model that uses a set of projection values from other models to predict possible outcomes. The sensitivity of EU agricultural products is analysed with various exchange rates (USD 0.90 per Euro to USD 1.50 per Euro), different tariff reduction formulas (according to the EU proposal, WTO draft proposal, and US proposal), and the scale limits in the Draft formula and US formula.

Out of the many proposals submitted to the WTO for the tariff reduction formula, the US proposal is the most extreme and the EU proposal is the most lenient with the G-20 proposal and the WTO draft proposal being in the middle. It is natural that the EU proposal will generate a lower number of sensitive products compared to the WTO draft proposal, and the US proposal will generate the highest number of sensitive products.

The results demonstrate that cereals such as wheat, barley, and maize are the most resilient to the erosion of border protection due to further reduction in tariffs in the projected Doha Round. In contrast, poultry meat has the weakest border protection in the projected Doha Round. The examined EU agricultural products are very sensitive to the fluctuations of exchange rate. In the projected Doha Round, there are no sensitive agricultural products in the EU if the Euro is very weak – USD 0.90 per Euro. On the contrary, a very strong Euro (USD 1.50 per Euro) will create the highest amount of sensitive products in the projected Doha Round.

WTO members are entitled to select and designate an appropriate number of sensitive products. Proposals have extended from as little as one percent to as much as fifteen percent of tariff lines. The EU has proposed eight percent of the tariff lines to be designated as sensitive products in contrast to the proposal for only one percent by the US and G-20 group. The WTO draft proposal estimated that the number of sensitive products may be between four to eight percent of all agricultural tariff lines. Thus, the EU may be eligible to designate between 88 to 176 tariff lines as sensitive products. This study has analysed only nine tariff lines out of the 2200 tariff lines for EU agricultural products. The examined EU agricultural products may represent other tariff lines in the same product category, but potential sensitive products at eight digit level have to be analysed individually in order to choose the correct and exact number of sensitive products for the EU.

Index words: EU, Doha Round, agriculture, tariffs, exchange rates, sensitive agricultural products, border protection, WTO draft proposal, EU proposal, US proposal

Contents

1 Introduction

The Doha Ministerial Declaration launched the so-called Doha Round of multilateral trade negotiations at the World Trade Organization (WTO) in November 2001 with agriculture being at the centre of these negotiations. Due to the single undertaking nature of the WTO negotiations, the protracted progress in the negotiations for agriculture has hindered negotiations on industrial goods (Non-Agriculture Market Access – NAMA) and services (General Agreement on Trade in Services – GATS). The Doha Round is stalled mainly because of disagreements in issues concerning market access and domestic support which are two of the main pillars under the Agreement on Agriculture along with export competition as the third pillar.

Market access is the most difficult of the three pillars to negotiate because all countries have market access barriers, whereas only some have export subsidies or domestic supports. Hence, the range of interests involved in the market access side of the negotiations is more complex. Most WTO members are under pressure to protect their farmers, but many also want to open up others' markets. Among developing countries, some are dubious about opening up agricultural trade and take a defensive position, while others want to see increased exports from developing countries to developed countries as well as more trade between developing countries.

The WTO negotiations dragged on for over seven years because of the divergent interests of the WTO members. Even among the developed countries, the United States (US) has different interests compared to the European Union (EU). The US is aggressively demanding for significant reduction in tariffs. Compared to the US, the EU is unable to lower its tariffs drastically because further tariff reductions will erode border protection for some of its important agricultural products. On the contrary, the EU is willing to reduce extensively its domestic support for agricultural production, but the US is reluctant to do so because of strong opposition from the US farm lobby. The US has to reform its Farm Bill to further reduce domestic support for its agricultural production.

The WTO Framework Agreement, agreed on 1 August 2004, commits WTO members to substantial reductions in trade distorting domestic support, the phase-out with a view to total elimination of all export subsidies, and substantial improvements in market access. The key points that emerged for market access are the type of tariff reduction formula that would produce the agreed result, how developing countries might be given further flexibility for their "special products" and be able to use "special safeguard" actions to deal with surges in imports or falls in prices, and how all countries' sensitive products might be treated. The number of sensitive products each government may select is to be negotiated. Even for these products, there has to be substantial improvement in market access, which can partly be achieved by creating or expanding tariff quotas. The fine print in the Framework Agreement carefully strikes a balance between different negotiating positions by saying the final result should also reflect the sensitivity of the product, and it sets some criteria for negotiating the expansion of tariff quotas that are open to all WTO members.

The WTO Framework Agreement does not spell out the formula for tariff reductions, but states that the formula must take into account the different tariff structures of WTO members. The stated main principles for the tariff reduction formula: every WTO member has to improve market access for all products, with the exception of the least-developed countries; a tiered and progressive formula so that tariffs in higher tiers have steeper cuts;

tariff reductions are from bound rates rather than the actual applied rates[1]; developing countries are to be given special and differential treatment, meaning a lower reduction formula compared to the developed countries; and all countries are allowed some flexibility in the way sensitive products are treated, but there must be substantial improvements in market access.

The WTO members have agreed on a four tiered formula, but the levels and the degree of tariff reductions in each tier are left for further negotiations. Whether the tariff reduction formula should define an overall maximum tariff rate or tariff cap and how sensitive products and special products should be treated are controversial issues among the WTO members. Out of the many proposals submitted to the WTO for the tariff reduction formula, the US proposal is the most extreme and the EU proposal is the most lenient with the G-20 proposal being in the middle. Meanwhile, the agriculture negotiations chairperson, Crawford Falconer, circulated a revised draft "modalities" on July 2007. This WTO draft proposal is an assessment of what might be agreed for the formulas for cutting tariffs and trade-distorting agricultural subsidies, drawn from WTO members' positions in the latest phase of the negotiations, based on what WTO members have proposed and debated in over seven years of negotiations.

The aim of this study is to estimate the sensitive agricultural products in the EU dairy, meat, cereals and sugar sector due to further tariff reductions and erosion of border protection by comparing the impact of the WTO draft proposal with the proposals from the EU and US. The impact of the G-20 tariff reduction formula is not shown because the WTO draft proposal is very similar to the G-20 proposal. Therefore, the projected impact of the WTO draft proposal can fairly represent the results for the G-20 proposal.

The EU agricultural products examined in this study by tariff lines at eight digit level are butter, skim milk powder, beef meat, poultry meat, pig meat, white sugar, wheat, barley, and maize.

2 Methodology and Data

A spreadsheet model is used as an analysis tool to complement the various modelling approaches in assessing policy reforms and identifying the sensitive agricultural products of the EU. The spreadsheet projection model is a simple forecasting model that uses a set of projection values from other models to predict possible outcomes. The set of projection values are obtained from partial equilibrium models such as AGLINK from the Organisation for Economic Co-operation and Development (OECD) and multi-market world models organized along commodity sectors and lines from the Food and Agricultural Policy Research Institute (FAPRI). The historical and projected world market prices for the examined agricultural products (except sugar[2]) are based on OECD Agricultural Outlook and FAPRI World Agricultural Outlook. The world market prices projections are conditional on specific economic and policy assumptions which present plausible scenarios for the evolution of these markets over the next decade. However, the policy assumptions

[1] Developing countries' applied tariff rates is often much lower than the bound rates. Thus, tariff reduction on bound rates might not mean a cut in the tariffs actually charged on imports.

[2] The historical world market prices for sugar are based on the average monthly prices of white sugar from the USDA Sugar and Sweetener Data Tables.

exclude the possible outcomes of the Doha Round that will entail policy changes worldwide and may have an impact on the world market prices.

A simple spreadsheet model is utilised for the projections because this software is available on almost all personal and networked microcomputer systems. It has the ability to hold large numerical datasets and perform complex calculations, including statistical analysis. Therefore, like standard scientific "black-box" models, they can perform calculations and generate output. More importantly, they have built-in graphical display capability. The spreadsheet model can also display graphics nested in the model which change as the variables or constants in the model change. The model is “transparent” in that simply clicking on a cell displays the cell contents as both formula and result. These three characteristics – availability, graphic display, and transparency – are the reason that spreadsheets are used as the tools for projecting the sensitive products in the EU. Most importantly, changes to the model can be made expediently, whereby new proposals for tariff reductions can be analysed in a short time frame.

In this study, three different tariff reduction formulas are used for the projections of border protection for EU agricultural products (Table 1). The Draft formula is from the WTO draft proposal by Crawford Falconer with a scale of 48 to 52 percent reduction in tariffs for tariff band threshold from zero to 20 percent. With the same tariff band threshold, the G-20 formula has a 45 percent reduction in tariffs, slightly lower than the reduction scale of the Draft formula. Thus, the projected impact of the Draft formula can reasonably represent the results for the G-20 formula. The EU formula with a lower tariff reduction of 35 percent has a wider tariff band threshold from zero to 30 percent. Finally, the US formula has similar tariff band threshold with the Draft formula and G-20 formula, but the proposed tariff reduction is higher with a scale of 55 to 65 percent. The rest of the tariff band thresholds are still similar between the Draft formula and G-20 formula, but different compared to the US formula and EU formula.

Table 1. Tariff reduction proposals from the Doha draft, G-20, EU, and US.

Draft formula		**G-20 formula**		**EU formula**		**US formula**	
Tariff band thresholds	Linear cuts	Tariff band thresholds	Linear cuts	Tariff band thresholds	Linear cuts	Tariff band thresholds	Linear cuts
0 - 20%	48 - 52%	0 - 20%	45 %	0 - 30%	35 %	0 - 20%	55 - 65%
20 - 50%	55 - 60%	20 - 50%	55 %	30 - 60%	45 %	20 - 40%	65 - 75%
50 - 75%	62 - 65%	50 - 75%	65 %	60 - 90%	50 %	40 - 60%	75 - 85%
> 75%	66 - 73%	> 75%	75 %	> 90%	60 %	> 60%	85 - 90%
Tariff cap	--	Tariff cap	100 %	Tariff cap	100 %	Tariff cap	75 %

The on-going negotiation process in the WTO under the Doha Development Agenda is assumed to be completed by the end of 2007 or the beginning of 2008. Hence, the new WTO round is assumed to begin in marketing year 2008/2009 and end in marketing year 2012/2013, over an assumed five-year implementation period (Table 2).

Table 2. Implementation period for the assumed Doha Round.

Base Year	Beginning Year	Ending Year	Implementation Period
2007/2008	2008/2009	2012/2013	5 years

The base year for the five years "linear" reduction in tariffs is 2007/2008, whereby the applied "specific tariff rate" for EU agricultural products in 2007/2008 is a continuance of the Uruguay Round's final bound rate in 2000/2001. The "specific tariff rate" for EU agricultural products is converted into ad-valorem equivalent in order to locate the tariff band threshold for implementing the proposed tariff cuts (Table 3).

The ad valorem equivalent tariff rates for EU agricultural products are taken from the EU's data submission to the WTO for the multilateral negotiations. These rates are calculated by working out the weighted average "unit value" of imports over the period of 1999-2001. Import values and quantities are sourced from the WTO Integrated Database (IDB) and the United Nation's Commodity Trade Statistics Database (Comtrade). The "unit import duty" (specific tariff rate) divided by the "unit value" of imports adjusted by the appropriate exchange rate will give an ad valorem equivalent tariff rate (see Appendix 1A). Formulas are used to deal with cases where the import values and quantities of any product are substantially affected by factors such as the existence of tariff quotas and other non-tariff barriers. The data are available at the six-digit level of the Harmonized System (HS) classification and also at the eight-digit level of the "Combined Nomenclature" (CN) classification, which is the EU's coding system for classifying products for customs and statistical purposes.

Table 3. EU agricultural products: Specific tariff rates converted into ad-valorem equivalent tariff rates at the eight-digit level of the "Combined Nomenclature" (CN) classification.

Products	CN code	Specific tariff Euro/ton	Ad-valorem equivalent in percentage
Butter	04051019	1896	101.33
Skim milk powder	04021019	1188	70.23
Beef meat	02021000	1768	99.30
Poultry meat	02071290	325	28.45
Pig meat	02032110	536	49.96
White sugar	17019910	419	166.93*
Wheat	10019099	95	61.06
Barley	10030090	93	73.02
Maize	10059000	94	77.55

* Author's own calculations (see Appendix 1B)

The ad valorem equivalent tariff rates (Table 3) are used to locate the tariff band threshold for implementing the proposed tariff cuts under the EU formula, Draft formula, and US formula (Table 1). The proposed tariff reduction percentages in the Draft formula and US formula have lower and upper tariff-cut limits for every tariff band threshold. In this study, the "specific tariff rate" for the product is reduced by using both the lower and upper tariff-cut limits of the proposals. This is to analyse whether there is a difference in results if the lower tariff-cut limit is used instead of the higher tariff-cut limit of the proposed scale. The erosion of border protection from both the lower and upper limit tariff-cuts for the examined EU agricultural products are influenced by the level of exchange rate between

the US Dollar and the Euro. The impacts of exchange rate fluctuations are analysed by using exchange rate from a scale of USD 0.90 per Euro to USD 1.50 per Euro.

3 The EU Dairy Sector

3.1 Market Analysis

The meteoric price increases experienced by global dairy markets to record levels in 2007 have been caused by continuing solid demand for dairy products in combination with rising feed costs and overall reduced supplies, most notably in Australia and the EU. Although the record prices may not persist, world market fundamentals point to continuing relatively high prices for at least the next few years. With empty EU intervention stores and little buffer stocks available in the form of US Government stocks, the up-side potential for prices increased dramatically in the face of excess demand. As global demand expanded, particularly in the fast-paced growth economies of Asia, exportable supplies were limited by drought in Australia and strong domestic consumption in the US and EU. Policy reforms in the EU are behind the reduction in EU dairy surpluses and the drop in subsidised exports. The continuance of high energy and feed prices, climate changes due to global warming, and the elimination of subsidised exports may constitute a more permanent element of price strength in the world dairy markets (Agra Europe 2007a & 2007b, FAPRI 2007, OECD-FAO 2007, USDA 2007).

According to the European Commission, the decline in EU milk production at a time of favourable market environment characterised by high internal and world prices has a profound impact on the current medium-term perspectives for milk supply and dairy commodity markets in the EU. Milk production in the EU is projected to expand at a modest rate over the short term in line with the increase in production quotas for milk. EU cheese production is expected to expand further over the medium term. Although cheese exports are foreseen to expand over the short term, the growth in domestic consumption would absorb most of the increase in cheese production, leading to a steady decline in exports over the medium term. Production of bulk dairy products is projected to decline due to the lower milk supply and increasing production of higher value added dairy products. EU butter production is foreseen to fall. Furthermore, lower availabilities and increasing competition on the world market would lead to declining butter exports. Butter intervention stocks, which were emptied in the first half of 2007, will remain empty until the end of 2014. The medium-term developments show a continuation of the downward trend for skim milk powder output. Skim milk powder exports are expected to fall further as the decline in production would maintain EU prices well above world market prices (European Commission 2007).

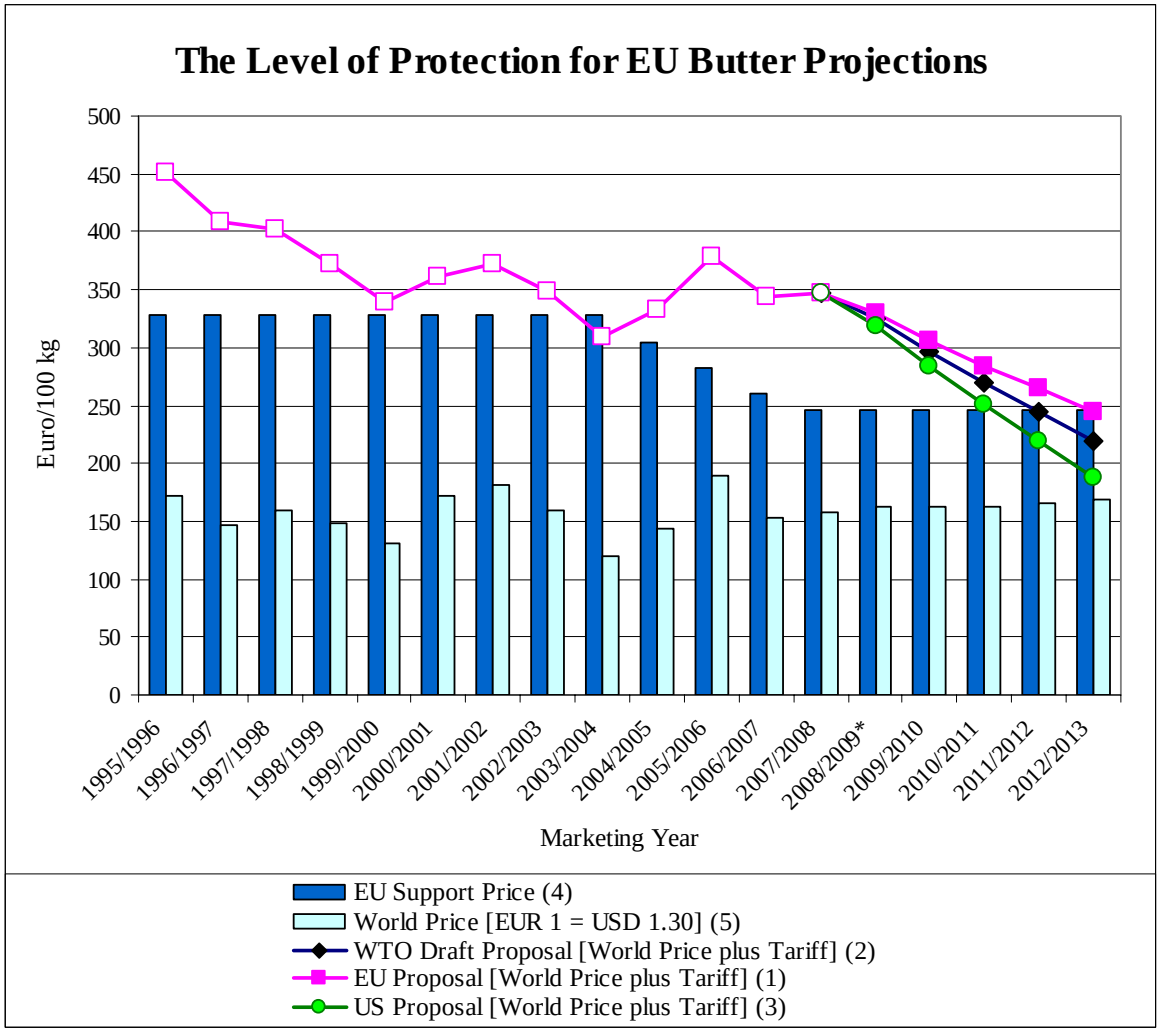
3.2 Border Protection Analysis

3.2.1 Butter

Border protection in the EU dairy sector is examined by using a product example under the category of butter. The “specific tariff rate” imposed by the EU for “butter in immediate packing of a net content exceeding 1kg” (CN code: 04051019) is EUR 1896 per ton. The calculated ad-valorem equivalent tariff rate is 101.33 percent. Tariff for butter is cut further

by 60 percent under the EU formula; tariff is cut further by 66 or 73 percent under the Draft formula; and tariff is cut further by 85 or 90 percent under the US formula.

Butter is one of the most sensitive products among the examined EU agricultural products (see Appendix 2 and 3). Butter is classified as a sensitive product in all of the three proposals if the exchange rate is on average USD 1.30 per Euro. There is no difference in applying the upper or lower tariff-cut limit of the Draft formula and US formula. Butter is still classified as a sensitive product under the lower tariff-cut limit. Below is one example showing the erosion of border protection for EU butter after further tariff reductions (upper limit tariff-cut). The reduced tariffs are unable to provide border protection for butter. The world market price plus tariff is lower than the intervention price for butter by the end of the Doha Round (see Figure 1).

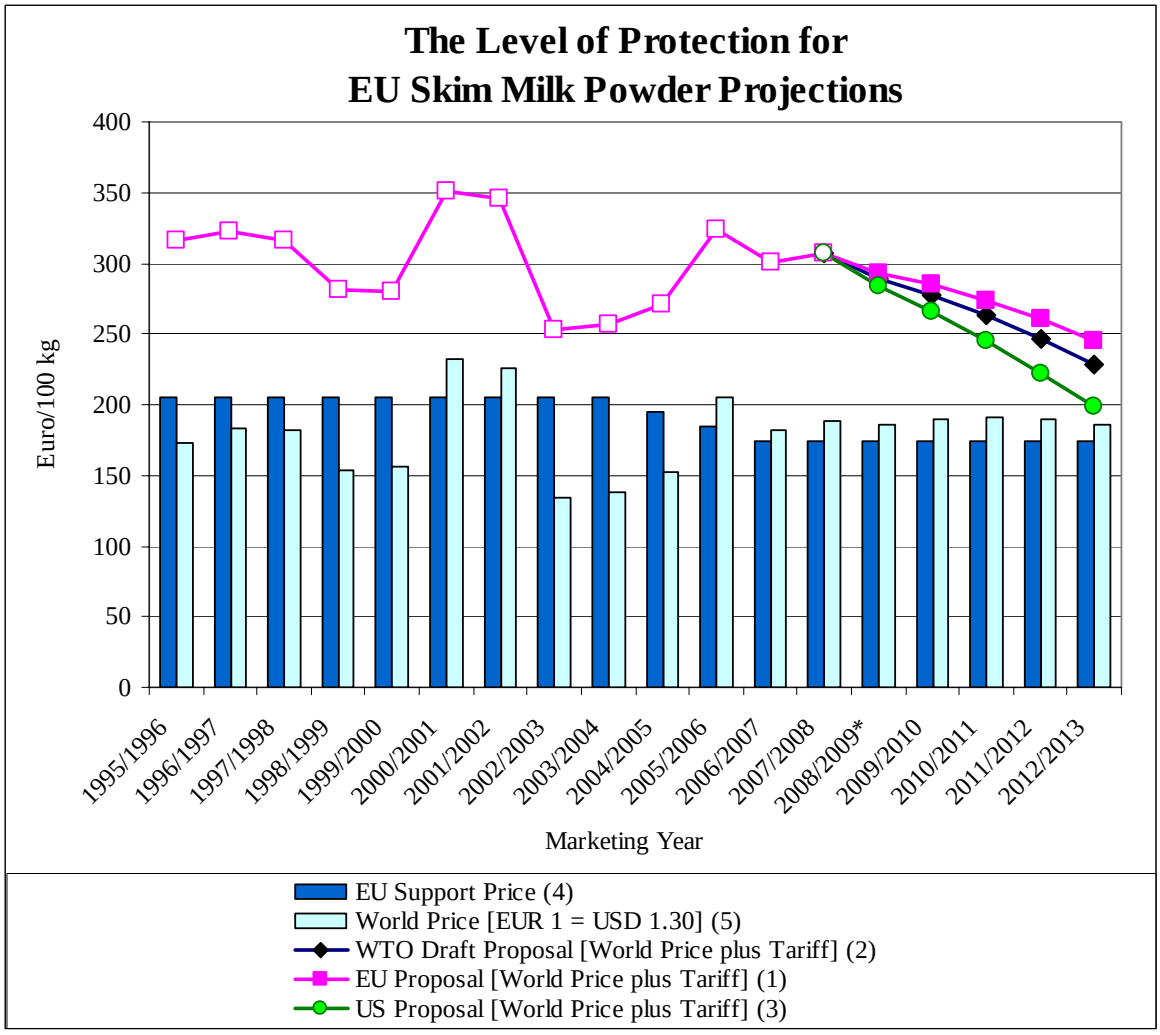


source: FAPRI World Agricultural Outlook (Commodity Price Projections), author's calculations
(1) Standard tariff is further reduced by 60% for butter
(2) Standard tariff is further reduced by 73% for butter
(3) Standard tariff is further reduced by 90% for butter
(4) CAP Reform Agreement that reduces butter support price from EUR 3282 per ton in year 2004 to EUR 2463.9 per ton in year 2007
(5) World Price is based on butter, 82% butterfat, Australian Export
* First implementation year for the new WTO round

Figure 1. Projections illustrating the erosion of border protection for EU butter due to tariff cuts under the WTO draft proposal, EU proposal, and US proposal.

3.2.2 Skim milk powder

Border protection in the EU dairy sector is examined by using a product example under the category of skim milk powder. The "specific tariff rate" imposed by the EU for "skim milk powder in immediate packing of a net content exceeding 2.5 kg" (CN code: 04021019) is EUR 1188 per ton. The calculated ad-valorem equivalent tariff rate is 70.23 percent. Tariff for skim milk powder is cut further by 50 percent under the EU formula; tariff is cut further by 62 or 65 percent under the Draft formula; and tariff is cut further by 85 or 90 percent under the US formula.



source: FAPRI World Agricultural Outlook (Commodity Price Projections), author's calculations
(1) Standard tariff is further reduced by 50% for skim milk powder
(2) Standard tariff is further reduced by 65% for skim milk powder
(3) Standard tariff is further reduced by 90% for skim milk powder
(4) CAP Reform Agreement that reduces skim milk powder support price from EUR 2055.2 per ton in year 2004 to EUR 1746.9 per ton in year 2007
(5) World Price is based on non-fat dry milk, Australian Export
* First implementation year for the new WTO round

Figure 2. Projections illustrating the erosion of border protection for EU skim milk powder due to tariff cuts under the WTO draft proposal, EU proposal, and US proposal.

Skim milk powder has one of the highest border protection by tariffs compared to the rest of the examined EU agricultural products, with exception of products in the cereals sector

(see Appendix 2 and 3). Skim milk powder is not classified as a sensitive product in all of the three proposals if the exchange rate is on average USD 1.30 per Euro. Figure 2 is an example showing the erosion of border protection for EU skim milk powder after further tariff reductions (upper limit tariff-cut). However, the reduced tariffs are able to provide sufficient border protection for skim milk powder. The world market price plus tariff is higher than the intervention price for skim milk powder by the end of the Doha Round.

4 The EU Meat Sector

4.1 Market Analysis

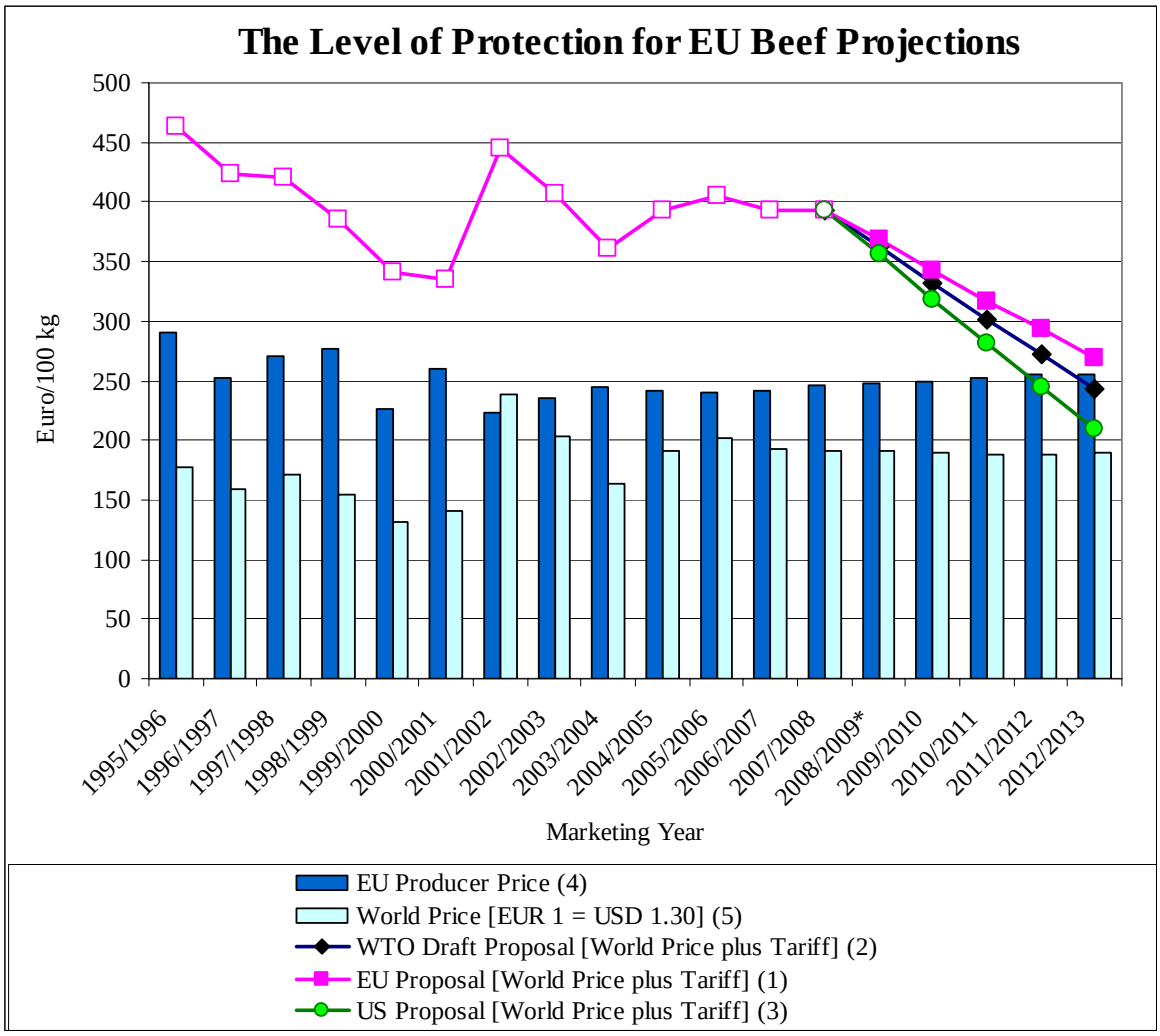
Sanitary and pytosanitary issues continued to affect the world meat market, depressing trade by two percent in 2006. Although some recovery is assumed, opening of some markets has been interrupted by suspected violations of new strict export standards. In the longer run, per capita meat consumption is expected to rise with sustained income and population growth. Rising meat demand fuels a 17.1 percent growth in total meat production over the next decade. Income and population growth and various production constraints enable consumption to rise faster than production in many countries, prompting these countries to satisfy their excess demand with low-cost imports. Demand recovery coupled with strong grain prices pushes all meat prices to high levels. Low-cost producers in the American continent are expected to capture a growing share of international meat trade. The global outlook for meat is increasingly characterised by rising production and consumption trends of developing countries and a more stable and mature development path of developed countries' markets. Still, animal disease outbreaks in recent years have affected established trade patterns for meat products, led to short-term disruptions to supply and demand in major trading countries, whereby increasing the market share of disease-free exporting countries. In response to the disease outbreaks, consumption decisions in developed countries will be driven by quality assurances such as traceability, meat-packing requirements and processing controls which reinforce an underlying preference for premium quality meats. Rising incomes and the ensuing diversification of diets will lead to a shift towards significantly higher meat consumption in developing countries, representing more than 80 percent of the expected growth in world demand. Much of this expansion will take place in Asia and the Pacific region, and will reflect in particular the rise in consumption of pig meat (OECD-FAO 2007, FAPRI 2007).

According to the European Commission, the main factor influencing medium-term projections on the beef sector is the impact of decoupling combined with an increase in cereal feed prices. This factor will reduce the incentives toward intensive beef production systems and generally reduce production from unprofitable production systems, generating an overall decline in EU beef production. Overall EU beef consumption is projected to decline gradually over the medium term as the potential increase fuelled by rising income levels would be offset broadly by the sustained price increases for beef and by the low consumer preference for beef meat. EU beef imports are expected to resume their growth and projected to reach 741 thousand tons. EU meat exports fell by 13 percent in 2006 as a combined effect of the strong Euro, high internal prices and lower export refund levels as well as the steady domestic demand. Over the medium term, EU meat exports will continue to be constrained by low domestic availability and lower competitiveness on the world market due to high internal prices versus low producer prices in the competing exporting countries. Therefore, EU meat exports are projected to decline further (European Commission 2007).

4.2 Border Protection Analysis

4.2.1 Beef meat

Border protection in the EU meat sector is examined by using a product example under the category of beef meat. The "specific tariff rate" imposed by the EU for "carcases and half-carcases of frozen meat of bovine animals" (CN code: 02021000) is EUR 1768 per ton[3]. The calculated ad-valorem equivalent tariff rate is 99.30 percent. Tariff for beef meat is cut further by 60 percent under the EU formula; tariff is cut further by 66 or 73 percent under the Draft formula; and tariff is cut further by 85 or 90 percent under the US formula.



source: FAPRI World Agricultural Outlook (Commodity Price Projections), author's calculations
(1) Standard and ad-valorem tariffs are further reduced by 60% for beef meat
(2) Standard and ad-valorem tariffs are further reduced by 73% for beef meat
(3) Standard and ad-valorem tariffs are further reduced by 90% for beef meat
(4) EU Producer Price is based on statistics from OECD Agricultural Outlook
(5) World Price is based on Australian Export (CIF U.S.)
* First implementation year for the new WTO round

Figure 3. Projections illustrating the erosion of border protection for EU beef meat due to tariff cuts under the WTO draft proposal, EU proposal, and US proposal.

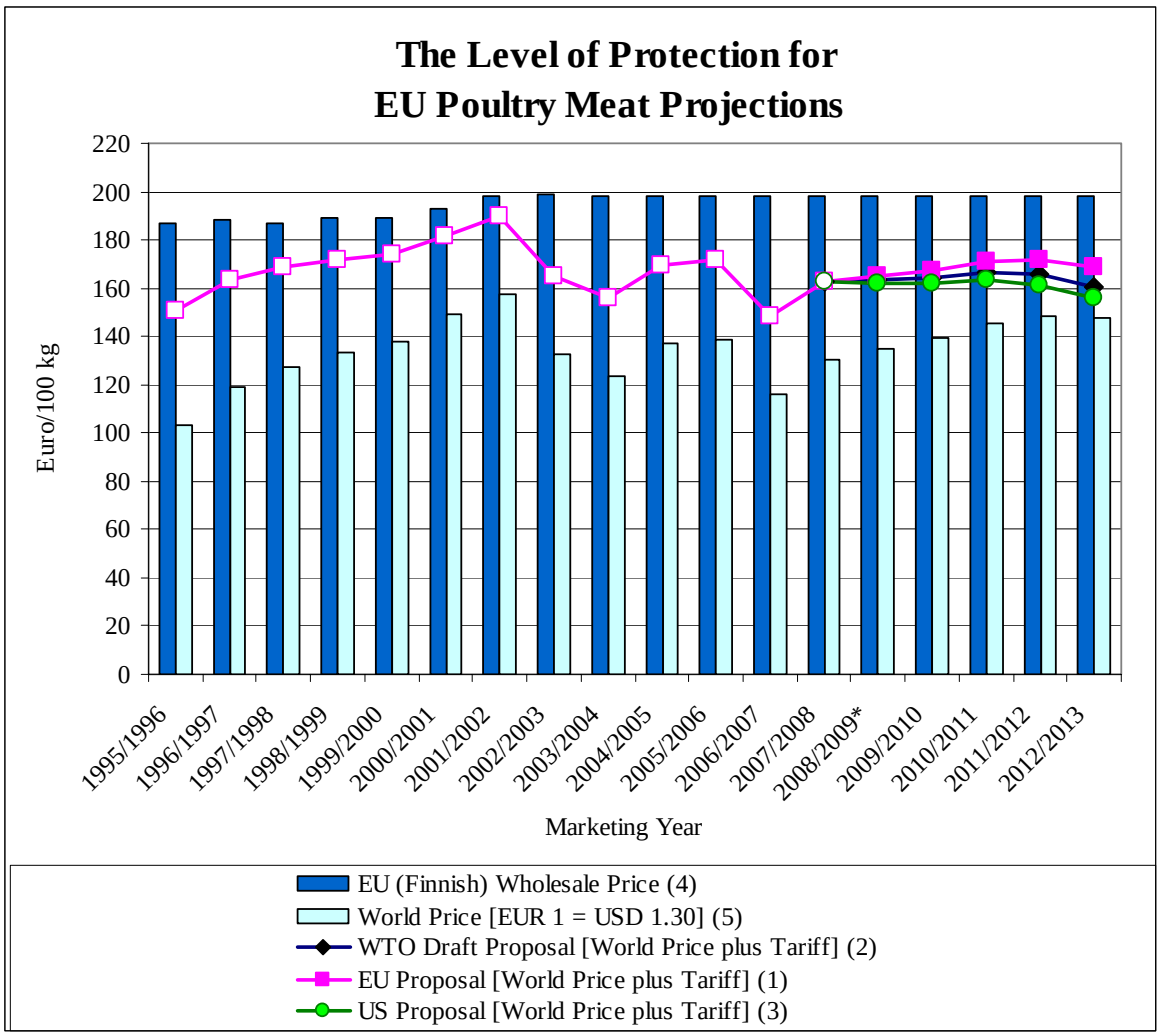
[3] There is also an additional ad-valorem tariff of 12.8 percent. Both "specific tariff rate" (EUR 1768 per ton) and ad-valorem tariff rate (12.8 % on import price) are imposed on this category of beef. In the calculations, the tariff-cut for the ad-valorem tariff rate of 12.8 percent is following the tariff-cut for the "specific tariff rate," thus both tariffs are cut the same way.

Beef meat is a relatively sensitive product compared to the other EU agricultural products (see Appendix 2 and 3). Beef meat is classified as a sensitive product in the WTO draft proposal and US proposal, but not in the EU proposal if the exchange rate is on average USD 1.30 per Euro. There is no difference in applying the upper or lower tariff-cut limit of the Draft formula and US formula. Beef meat is still classified as a sensitive product under the lower tariff-cut limit. Figure 3 is an example showing the erosion of border protection for EU beef meat after further tariff reductions (upper limit tariff-cut). The reduced tariffs are unable to provide border protection for beef meat under the Draft formula and US formula. However, under the EU formula, the reduced tariffs are able to provide enough border protection for beef meat.

4.2.2 Poultry meat

Border protection in the EU meat sector is examined by using a product example under the category of poultry meat. The “specific tariff rate” imposed by the EU for “plucked and drawn, without heads, feet, necks, hearts, livers and gizzards, known as 65 % chickens” (CN code: 02071290) is EUR 325 per ton. The calculated ad-valorem equivalent tariff rate is 28.45 percent. Tariff for poultry meat is cut further by 35 percent under the EU formula; tariff is cut further by 55 or 60 percent under the Draft formula; and tariff is cut further by 65 or 75 percent under the US formula.

Among the examined EU agricultural products, poultry meat is the most sensitive product (see Appendix 2 and 3). Poultry meat is classified as a sensitive product in all of the three proposals if the exchange rate is on average USD 1.30 per Euro. There is no difference in applying the upper or lower tariff-cut limit of the Draft formula and US formula. Poultry meat is still classified as a sensitive product under the lower tariff-cut limit. Figure 4 is one example showing the erosion of border protection for EU poultry meat after further tariff reductions (upper limit tariff-cut). The reduced tariffs are unable to provide border protection for poultry meat. During the entire Doha Round, the world market price (US wholesale price for broiler meat) plus tariff is lower than the wholesale price for poultry meat (wholesale price in Finland is used as the benchmark price for EU poultry meat). Even during the whole Uruguay Round and after, this category of poultry meat had been experiencing problems with border protection. The price-based special safeguard system has been made continuously operational for poultry meat [as an example, see the WTO notification made by the EU (WTO 2003)].



source: OECD-FAO Agricultural Outlook and Information Centre of the Ministry of Agriculture and Forestry (TIKE) in Finland, author's calculations
(1) Standard tariff is further reduced by 35% for poultry meat
(2) Standard tariff is further reduced by 60% for poultry meat
(3) Standard tariff is further reduced by 75% for poultry meat
(4) Average selling price in slaughter plants for whole 'class A' chickens (known as 65% chickens)
(5) World Price is based on U.S. wholesale weighted average broiler price 12 cities
* First implementation year for the new WTO round

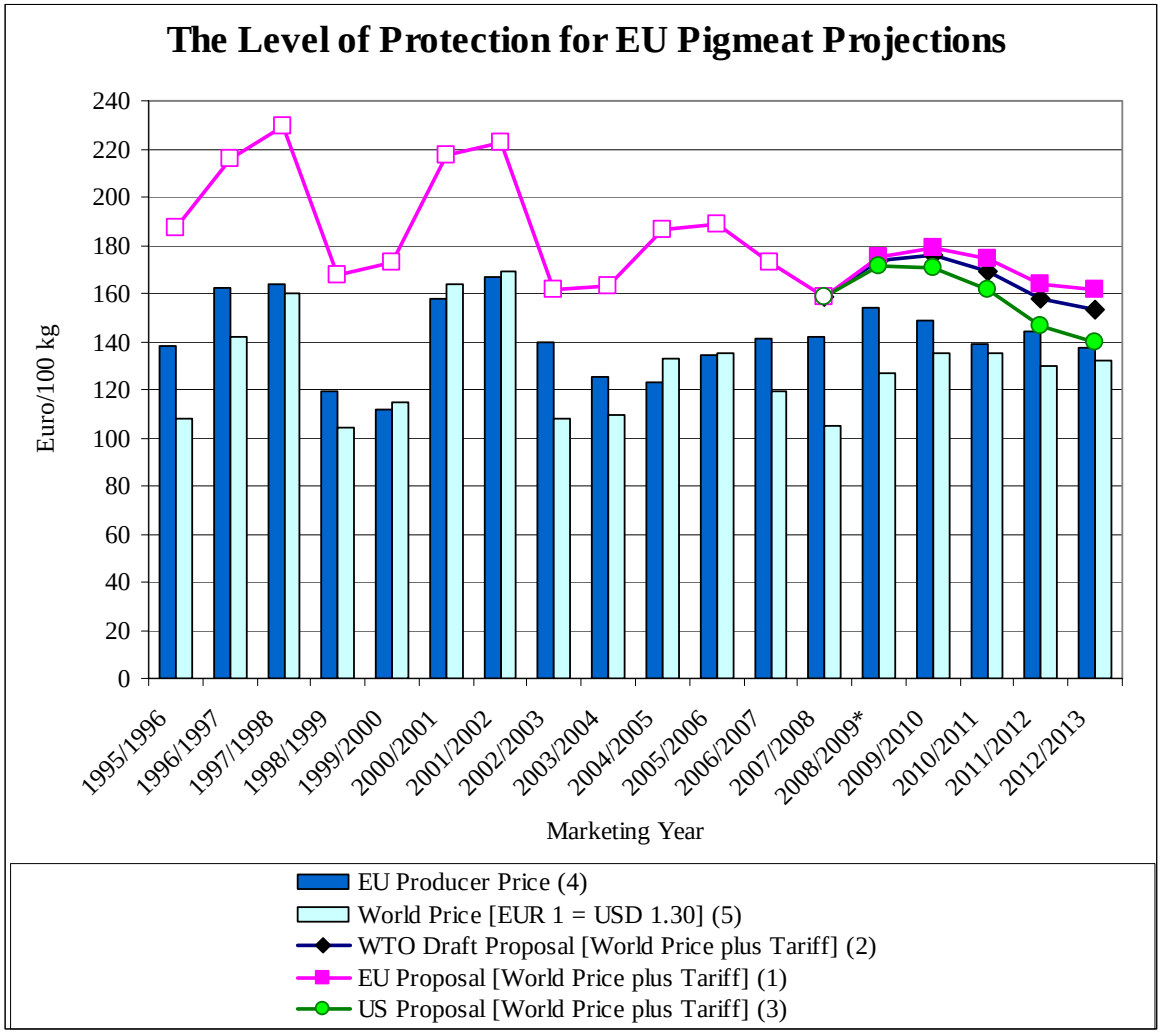
Figure 4. Projections illustrating the erosion of border protection for EU poultry meat due to tariff cuts under the WTO draft proposal, EU proposal, and US proposal.

4.2.3 Pig meat

Border protection in the EU meat sector is examined by using a product example under the category of pig meat. The "specific tariff rate" imposed by the EU for "frozen carcases and half-carcases of domestic swine" (CN code: 02032110) is EUR 536 per ton. The calculated ad-valorem equivalent tariff rate is 49.96 percent. Tariff for pig meat is cut further by 45 percent under the EU formula; tariff is cut further by 55 or 60 percent under the Draft formula; and tariff is cut further by 75 or 85 percent under the US formula.

Compared to the other EU meat products, pig meat is the least sensitive meat product (see Appendix 2 and 3). Pig meat is not classified as a sensitive product in all of the three proposals (except the upper limit tariff cut under the US proposal) if the exchange rate is

on average USD 1.30 per Euro. Figure 5 is an example showing the erosion of border protection for EU pig meat after further tariff reductions (upper limit tariff-cut). There is a difference in applying the upper or lower tariff-cut limit of the US formula. Pig meat is still classified as a sensitive product under the upper tariff-cut limit, but not in the lower tariff-cut limit of the US formula. The tariff for pig meat after being reduced by the upper tariff-cut limit of the US formula will not be enough to provide border protection for pig meat.



source: OECD-FAO Agricultural Outlook, author's calculations
(1) Standard tariff is further reduced by 45% for pig meat
(2) Standard tariff is further reduced by 60% for pig meat
(3) Standard tariff is further reduced by 85% for pig meat
(4) Pig Producer Price
(5) World Price is based on U.S. barrows and gilts, no. 1-3, 230-250 lb lw, Iowa/South Minnesota -- lw to dw conversion factor 0.74
* First implementation year for the new WTO round

Figure 5. Projections illustrating the erosion of border protection for EU pig meat due to tariff cuts under the WTO draft proposal, EU proposal, and US proposal.

5 The EU Sugar Sector

5.1 Market Analysis

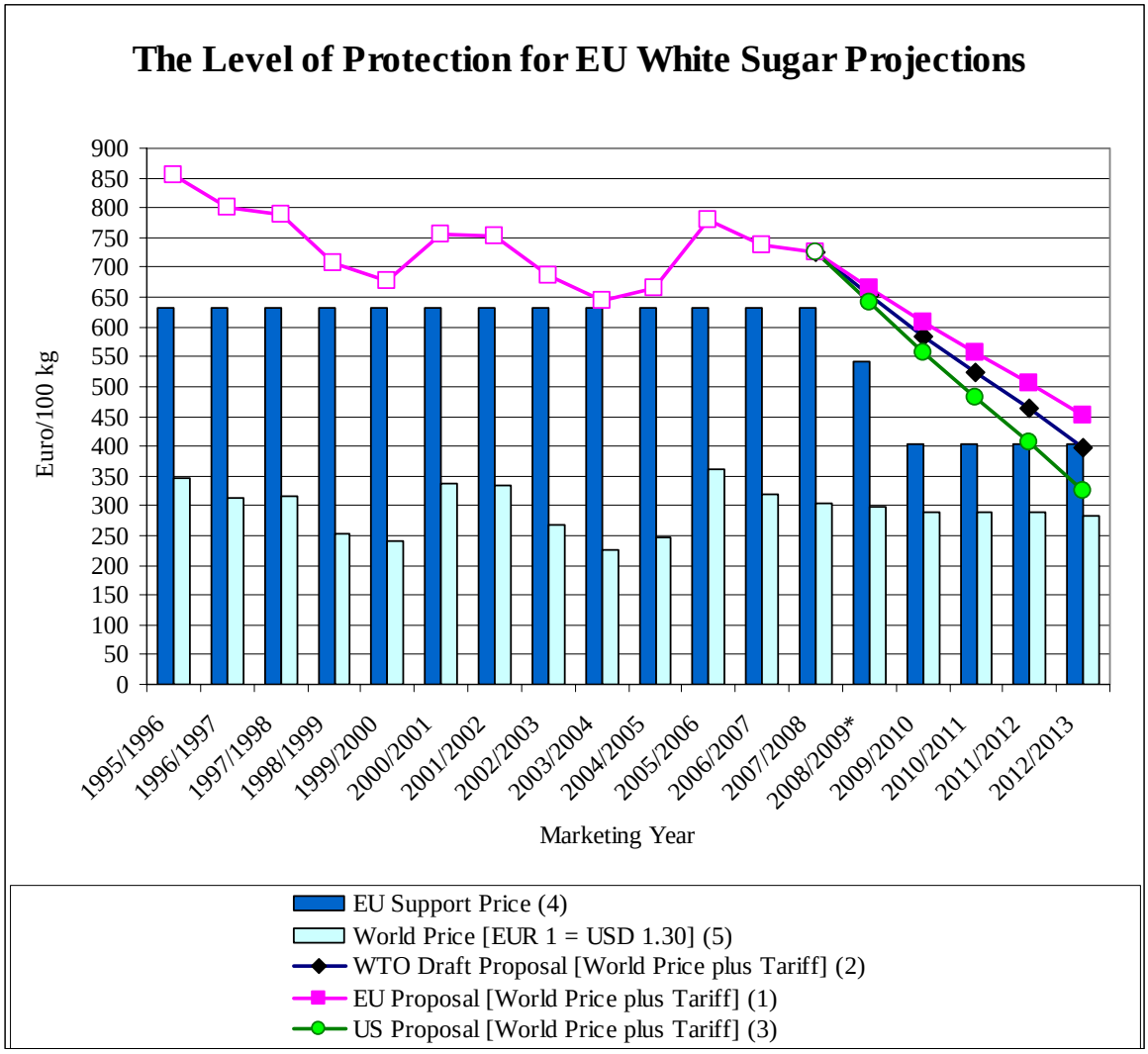
World sugar prices surged in late 2005 and early 2006 to reach 25-year highs under the pressure of tight global supplies and growing linkages between international sugar and oil prices due to increased demand for bio-fuels. Though, world sugar prices drop to lower levels in 2007. The lower sugar prices reflect abundant supplies, higher stocks and an emerging global surplus. World sugar stocks declined for three consecutive years before increasing by 13.6 percent in 2006/07. Sugar reform in the EU and the decrease in large supplies of white sugar from the international market contributed to a widening white sugar premium in 2006. Currently, Brazil is the world's leading sugar and ethanol producer and accounts for around 40 percent of world sugar trade. Brazil remains the dominant world supplier, given continued record sugar production and the country's potential for expansion. The amount of cane available in Brazil for sugar production and sugar exports is projected to rise strongly and have an influence on world price over the coming decade. In India, sugar production recovered in year 2005-2006 with production increasing by 48.7 percent. Sugar production in India increased by 19.1 percent in 2006-2007. India is expected to be a major exporter of sugar with net exports reaching 2.4 million tons. Countries in Asia are expected to experience the fastest growth in sugar consumption, with China, Indonesia, Korea and Japan remaining as significant sugar importers (OECD-FAO 2007, FAPRI 2007).

According to the European Commission, the reform of the EU sugar market affects the economic framework for EU sugar beet production and processing in two stages: (1) the transition phase until 2009-2010 with a step-wise reduction of the reference prices, the offer of aided restructuring and phasing-in of increasing import rights for the least developed countries in the framework of the Everything But Arms (EBA) initiative; (2) the complete opening of the EU sugar markets for EBA imports as well as restoring competitiveness of European sugar production from 2010-2011 onwards. A restructuring of the sugar industry and sugar beet production would follow the relative competitiveness of the region. The competitiveness of regions is related to production costs for sugar beet, structure of the processing industry and transport systems. The competitive production regions are mostly located in France, Belgium and parts of Germany. These regions appear suitable also for bio-fuel production from sugar beet and would be suited to keep most of their present sugar beet production. Over the short to medium term, sugar beet production in the EU is expected to decline in the least competitive regions of the EU. The main driving element of restructuring would be the level of imports. It is assumed that the least developed countries would have the competitiveness to deliver to the EU quantities of exports amounting to 2.2 million tons from 2010 onwards. Total imports would reach 4.4 million tons, coming mainly from African, Caribbean and Pacific (ACP) countries, least developed countries, and Balkan countries as well as from import quotas given after the accession of Bulgaria and Romania (European Commission 2007).

5.2 Border Protection Analysis

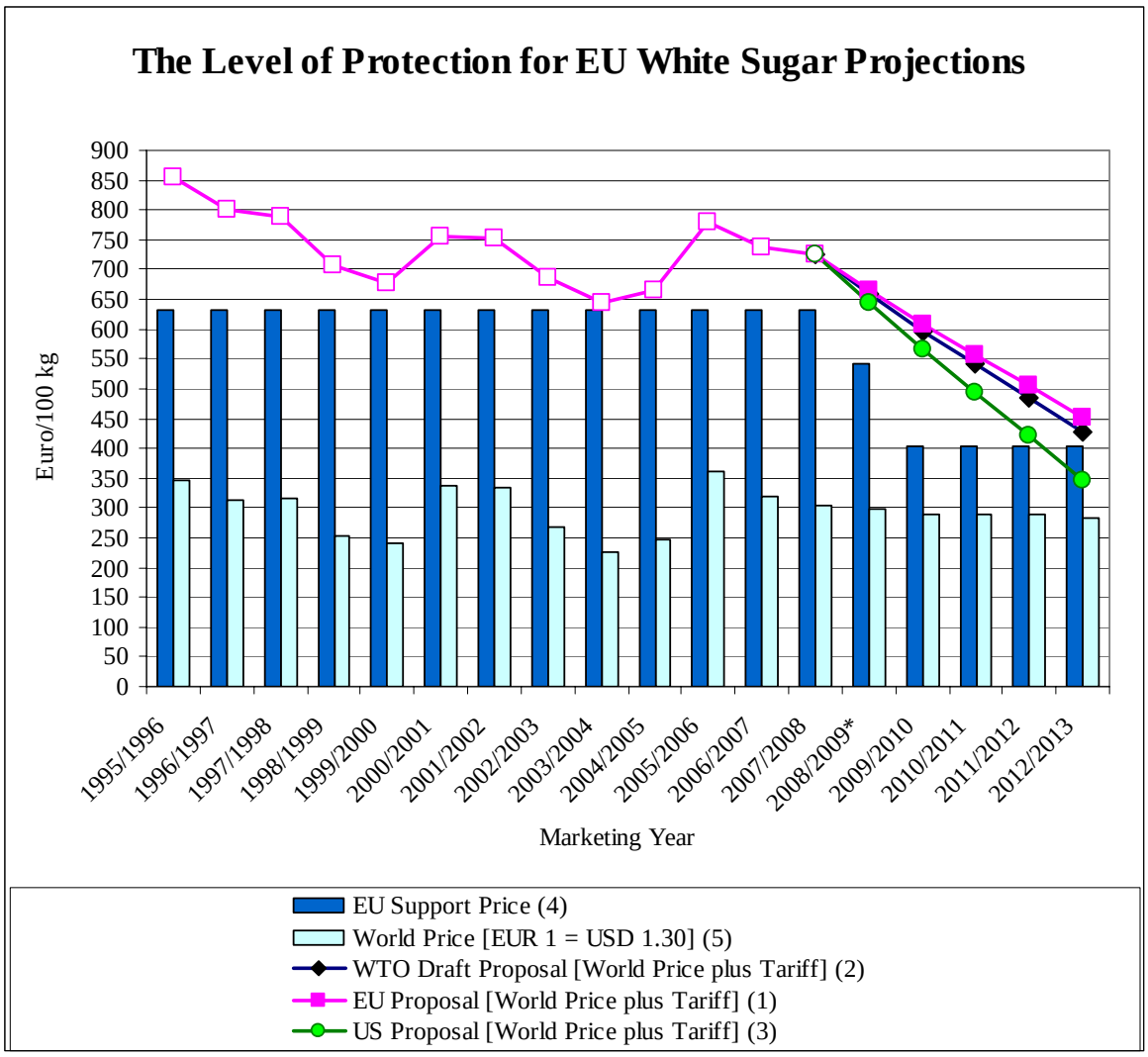
5.2.1 White sugar

Border protection in the EU sugar sector is examined by using a product example under the category of white sugar. The "specific tariff rate" imposed by the EU for "white sugar not containing added flavouring or colouring matter" (CN code: 17019910) is EUR 419 per ton. The calculated ad-valorem equivalent tariff rate is 166.93 percent (see Appendix 1B). Tariff for white sugar is cut further by 60 percent under the EU formula; tariff is cut further by 66 or 73 percent under the Draft formula; and tariff is cut further by 85 or 90 percent under the US formula.



source: OECD-FAO Agricultural Outlook and USDA Sugar and Sweetener Data Tables, author's calculations
(1) Standard tariff is further reduced by 60% for white sugar
(2) Standard tariff is further reduced by 73% for white sugar
(3) Standard tariff is further reduced by 90% for white sugar
(4) CAP Reform Agreement that reduces white sugar support price from EUR 631.9 per ton in year 2005/2006 to EUR 404.4 per ton in year 2009/2010
(5) World Price is based on refined sugar price, London, No. 5, f.o.b. Europe, spot.
* First implementation year for the new WTO round

Figure 6. Projections illustrating the erosion of border protection for EU white sugar due to tariff cuts under the WTO draft proposal, EU proposal, and US proposal *(upper limit tariff-cut)*.



source: OECD-FAO Agricultural Outlook and USDA Sugar and Sweetener Data Tables, author's calculations
(1) Standard tariff is further reduced by 60% for white sugar
(2) Standard tariff is further reduced by 66% for white sugar
(3) Standard tariff is further reduced by 85% for white sugar
(4) CAP Reform Agreement that reduces white sugar support price from EUR 631.9 per ton in year 2005/2006 to EUR 404.4 per ton in year 2009/2010
(5) World Price is based on Contract No. 5, London Daily Price for refined sugar
* First implementation year for the new WTO round

Figure 7. Projections illustrating the erosion of border protection for EU white sugar due to tariff cuts under the WTO draft proposal, EU proposal, and US proposal *(lower limit tariff cut)*.

White sugar is a relatively sensitive product compared to the other EU agricultural products (see Appendix 2 and 3). White sugar is classified as a sensitive product in the US proposal and WTO draft proposal under the upper tariff-cut limit, but not in the EU proposal and the lower tariff-cut limit of the WTO draft proposal if the exchange rate is on average USD 1.30 per Euro. There is a difference in applying the upper or lower tariff-cut limit of the Draft formula because white sugar is classified as a sensitive product under the upper tariff-cut limit, but not under the lower tariff-cut limit. Figure 6 is an example showing the erosion of border protection for EU white sugar under the upper tariff-cut limit and Figure 7 is an example showing the erosion of border protection under the lower tariff-cut limit.

6 The EU Cereals Sector

6.1 Market Analysis

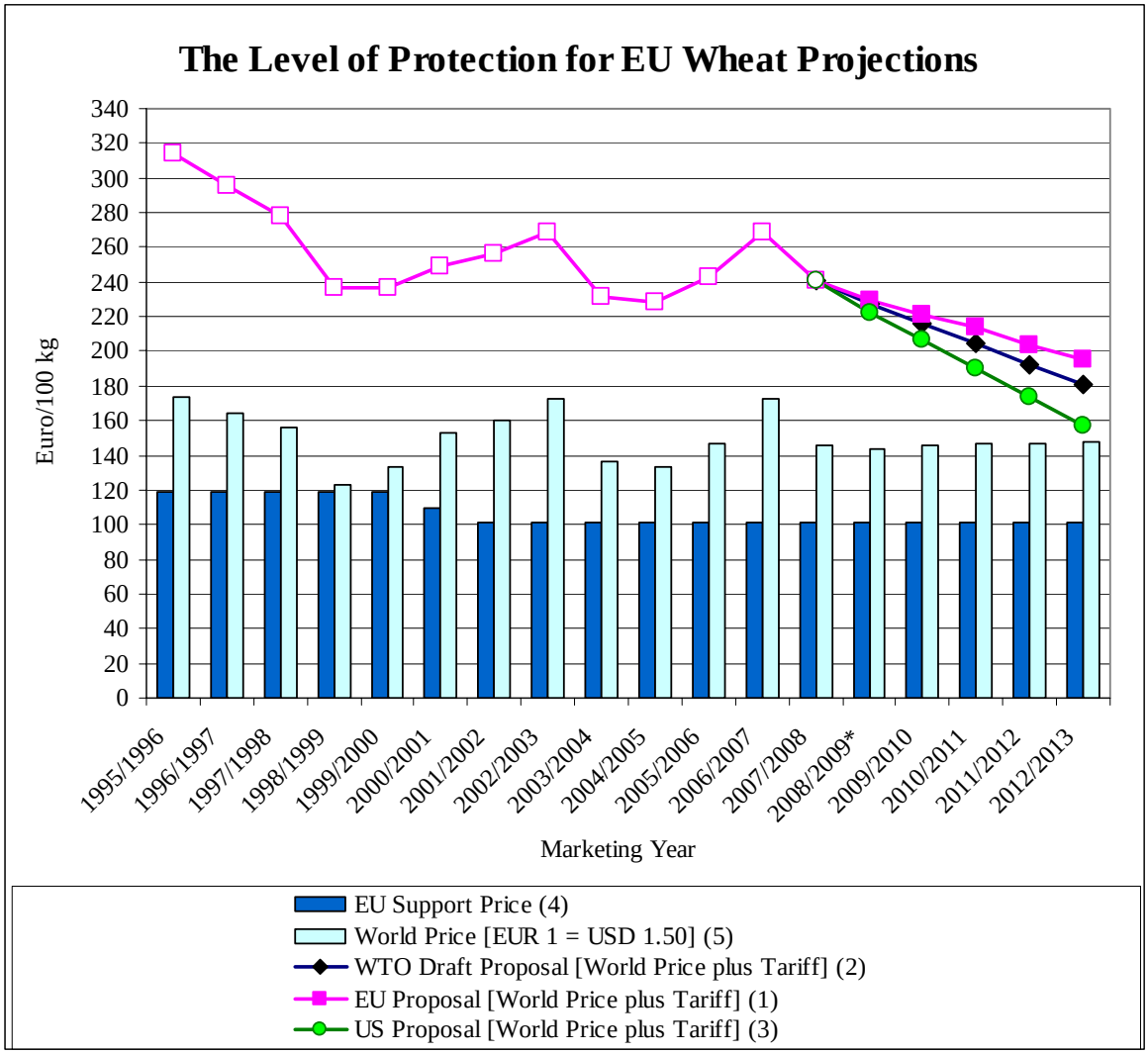
The low world cereal harvest in 2006-2007 and the steady rise in global cereal consumption led to extremely high cereal prices close to those seen under similar circumstances in 1996. Weather-related shortfalls in production have occurred in a number of producing countries and regions such as the US, Canada, Russia, Ukraine, as well as the EU, and most notably in Australia where production fell by more than 50 percent. As a result of the low harvest, world cereal stocks in the main exporting countries are at low levels. In a context of low global cereal stocks in recent years, these lower supplies have been a strong factor underpinning world market prices. Reduced global stocks and production were confronted with stronger than expected demand for cereals for bio-fuel production, notably in North America and Europe. Maize prices in the US have undoubtedly been supported by increased bio-fuel production. This additional demand compounded the already tight supply situation and contributed to further strengthening of world cereal prices. It is worth mentioning that the combined cereal supply shortfall in North America, Europe and Australia in 2006 of over 60 million tons was nearly four times larger than the 17 million tons increase in cereal use for ethanol in these countries. Under the assumption of a return to normal yields, and the incentive of currently higher prices, global cereal production is projected to recover from the shortfalls experienced in the past year. Much of the growth in output is expected to stem from area productivity gains as world prices decline from current highs. The bulk of wheat and coarse grain production will continue to be concentrated with the largest producers: the EU, China, the US, and India – dominating over half of total world output. Rising per capita incomes and developing food markets are behind the swelling demand that has outpaced domestic production capacity. More generally growth in per capita food consumption of wheat is expected to remain modest in most countries. Despite the prospects of increased bio-fuel use of maize, which will be largely grown domestically, demand growth for coarse grains in world markets will be predominantly driven by increased feed demand from thriving livestock industries in emerging economies such as China, India and Argentina. Import growth in China will augment its position as a major coarse grain importer (OECD-FAO 2007, FAPRI 2007).

According to the European Commission, the EU is expected to record successive lower than average harvests from 2006 to 2008, which would empty the intervention stores. The exceptionally high price level in the EU provided greater market fluidity in the land locked EU member states even with the presence of high transport costs. These factors should contribute to firmer cereal prices for the next few years until cereal stocks in the EU would replenish. The phasing-out of maize intervention will assure fluidity of maize markets in Hungary, Slovakia, Bulgaria and Romania over the medium term and, thus, considerably reduce the risks of regional structural surpluses even in presence of high harvests and continuously high transport costs. Domestic use of cereals is foreseen to increase due to the growth in the emerging bio-ethanol and biomass industry in the EU. The EU should increasingly benefit from a growing world demand supported by the strengthening of the US dollars over the medium term. These developments on the internal and external markets would result in relatively balanced cereal markets over the medium term in most EU regions (European Commission 2007).

6.2 Border Protection Analysis

6.2.1 Wheat

Border protection in the EU cereals sector is examined by using a product example under the category of wheat. The "specific tariff rate" imposed by the EU for "high quality common wheat, other than for sowing" (CN code: 10019099) is EUR 95 per ton. The calculated ad-valorem equivalent tariff rate is 61.06 percent. Tariff for wheat is cut further by 50 percent under the EU formula; tariff is cut further by 62 or 65 percent under the Draft formula; and tariff is cut further by 85 or 90 percent under the US formula.



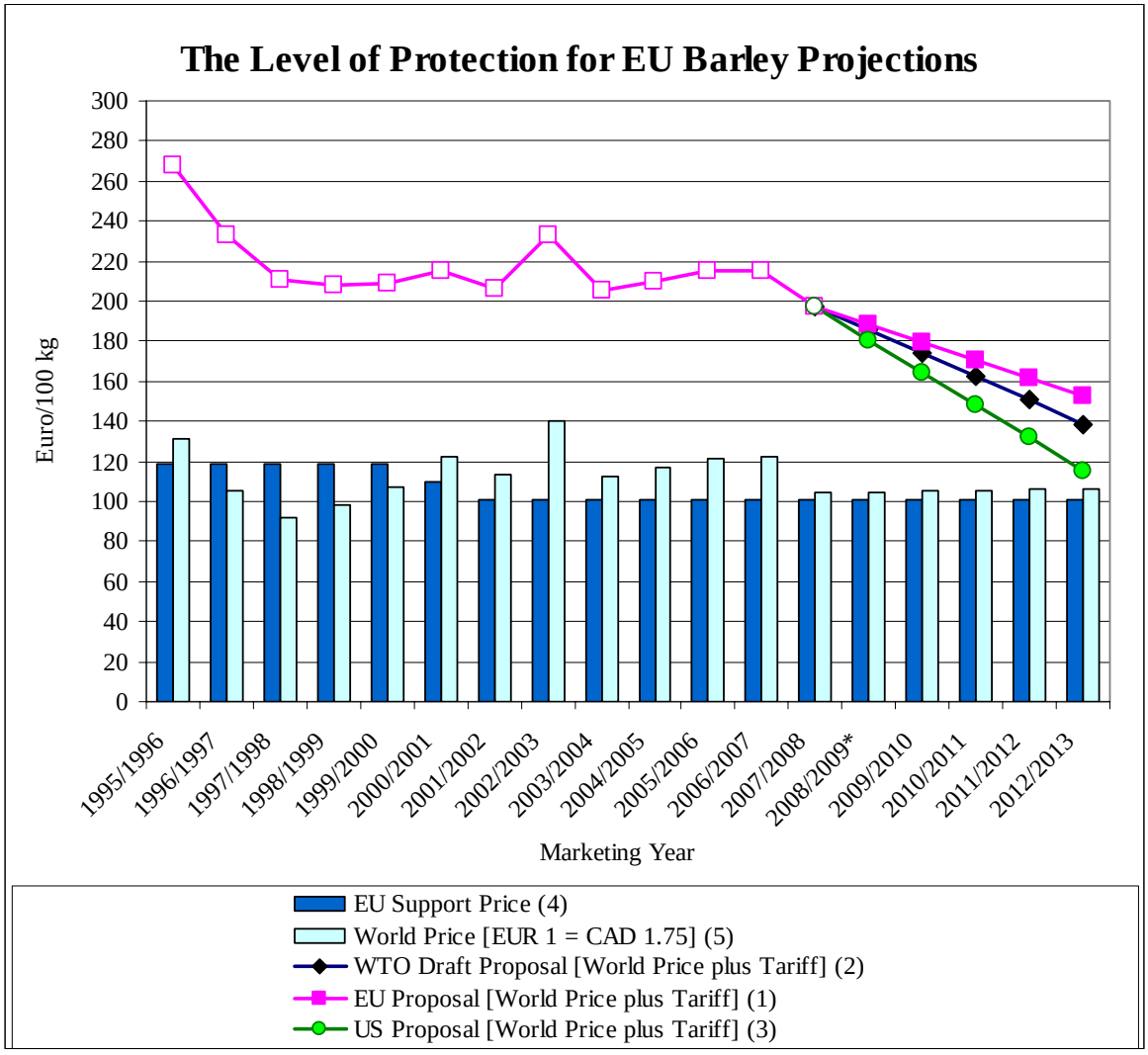
source: FAPRI World Agricultural Outlook (Commodity Price Projections), author's calculations
(1) Standard tariff is further reduced by 50% for wheat
(2) Standard tariff is further reduced by 65% for wheat
(3) Standard tariff is further reduced by 90% for wheat
(4) Agenda 2000 Agreement that reduced wheat support price from EUR 119.20 per ton in year 1999 to EUR 101.31 per ton in year 2002
(5) World Price is based on U.S. FOB Gulf
* First implementation year for the new WTO round

Figure 8. Projections illustrating the erosion of border protection for EU wheat due to tariff cuts under the WTO draft proposal, EU proposal, and US proposal.

Wheat has one of the highest border protection by tariffs compared to the rest of the examined EU agricultural products (see Appendix 2 and 3). Wheat is not classified as a sensitive product in all of the three proposals even if the exchange rate is on average USD 1.50 per Euro. Figure 8 is an example showing the erosion of border protection for EU wheat after further tariff reductions (upper limit tariff-cut). The reduced tariffs are more than sufficient to provide border protection for wheat in spite of a very strong Euro. The world market price plus tariff is still higher than the intervention price for wheat by the end of the Doha Round.

6.2.2 Barley

Border protection in the EU cereals sector is examined by using a product example under the category of barley.



source: OECD-FAO Agricultural Outlook, author's calculations
(1) Standard tariff is further reduced by 50% for barley
(2) Standard tariff is further reduced by 65% for barley
(3) Standard tariff is further reduced by 90% for barley
(4) Agenda 2000 Agreement that reduced barley support price from EUR 119.20 per ton in year 1999 to EUR 101.31 per ton in year 2002
(5) World Price is based on Canadian Wheat Board (CWB) final price, No. 1 CW barley, St. Lawrence
* First implementation year for the new WTO round

Figure 9. Projections illustrating the erosion of border protection for EU barley due to tariff cuts under the WTO draft proposal, EU proposal, and US proposal.

The "specific tariff rate" imposed by the EU for "barley, other than seed" (CN code: 10030090) is EUR 93 per ton. The calculated ad-valorem equivalent tariff rate is 73.02 percent. Tariff for barley is cut further by 50 percent under the EU formula; tariff is cut further by 62 or 65 percent under the Draft formula; and tariff is cut further by 85 or 90 percent under the US formula.

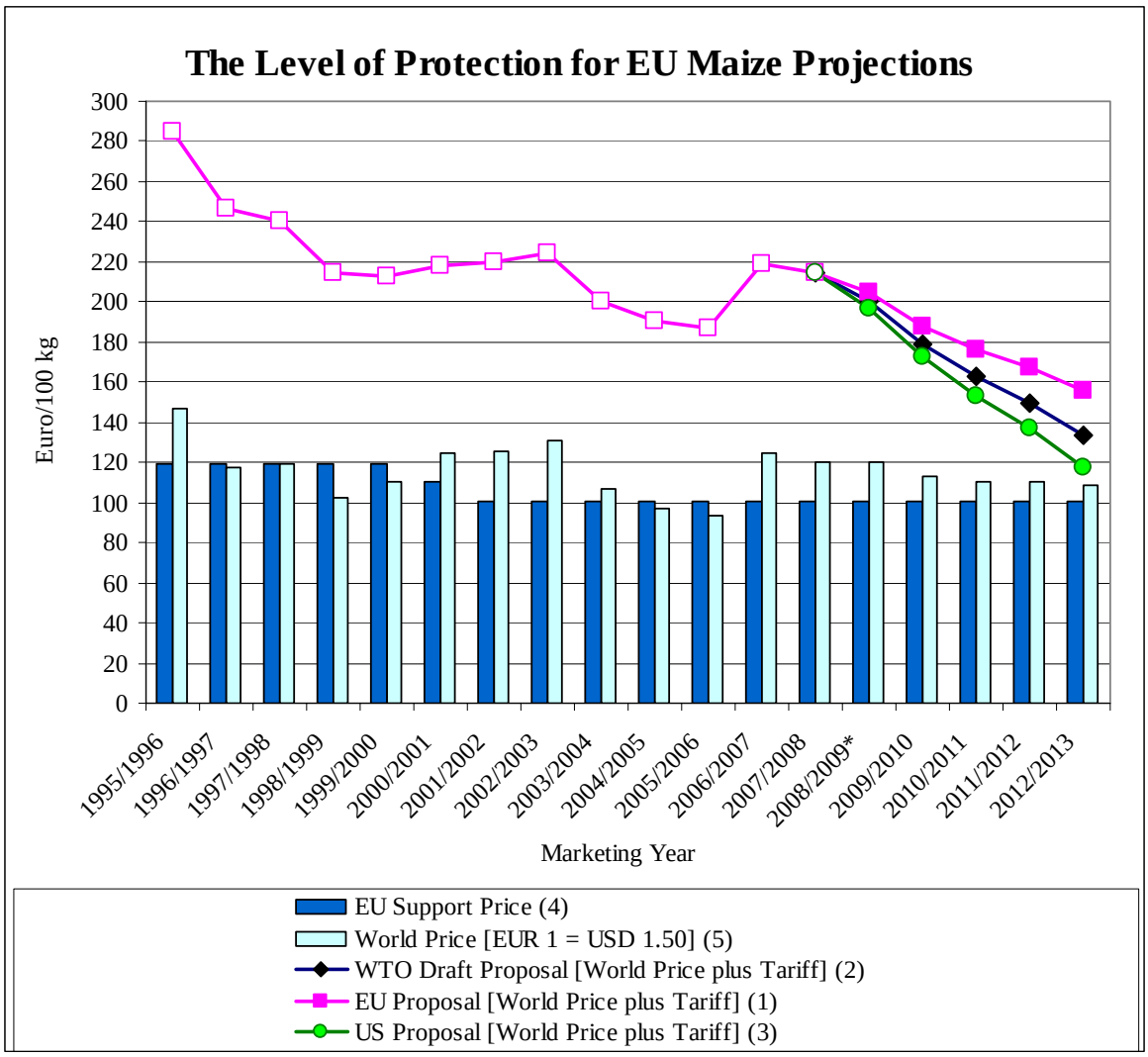
Barley has one of the highest border protection by tariffs compared to the rest of the examined EU agricultural products (see Appendix 2 and 3). Barley is not classified as a sensitive product in all of the three proposals even if the exchange rate is on average CAD 1.75 per Euro or approximately USD 1.50 per Euro[4]. Figure 9 is an example showing the erosion of border protection for EU barley after further tariff reductions (upper limit tariff-cut). The reduced tariffs are adequate to provide border protection for barley in spite of a very strong Euro. The world market price plus tariff is still higher than the intervention price for barley by the end of the Doha Round.

6.2.3 Maize

Border protection in the EU cereals sector is examined by using a product example under the category of maize. The "specific tariff rate" imposed by the EU for "maize, other than seed" (CN code: 10059000) is EUR 94 per ton. The calculated ad-valorem equivalent tariff rate is 77.55 percent. Tariff for maize is cut further by 50 percent under the EU formula; tariff is cut further by 66 or 73 percent under the Draft formula; and tariff is cut further by 85 or 90 percent under the US formula.

Maize has one of the highest border protection by tariffs compared to the rest of the examined EU agricultural products (see Appendix 2 and 3). Maize is not classified as a sensitive product in all of the three proposals even if the exchange rate is on average USD 1.50 per Euro. Figure 10 is an example showing the erosion of border protection for EU maize after further tariff reductions (upper limit tariff-cut). The reduced tariffs are sufficient to provide border protection for maize in spite of a very strong Euro. The world market price plus tariff is still higher than the intervention price for maize by the end of the Doha Round.

[4] In the projections for barley, the strong Euro is represented by the Canadian Dollar instead of the US Dollar. The reason is that the world market price for barley is denominated in Canadian Dollar instead of US Dollar. The world market price is based on Canadian Wheat Board (CWB) final price, No. 1 CW barley, St. Lawrence.



source: OECD-FAO Agricultural Outlook, author's calculations
(1) Standard tariff is further reduced by 50% for maize
(2) Standard tariff is further reduced by 73% for maize
(3) Standard tariff is further reduced by 90% for maize
(4) Agenda 2000 Agreement that reduced maize support price from EUR 119.20 per ton in year 1999 to EUR 101.31 per ton in year 2002
(5) World Price is based on No. 2 yellow corn, US f.o.b. Gulf Ports
* First implementation year for the new WTO round

Figure 10. Projections illustrating the erosion of border protection for EU maize due to tariff cuts under the WTO draft proposal, EU proposal, and US proposal.

7 Sensitivity Analysis

The sensitivity of EU agricultural products to diverse exchange rates, a variety of tariff reduction formulas (according to the EU, WTO draft, and US proposals), and different limits (lower and upper scale) of tariff-cuts in the Draft formula and US formula is shown in Appendix 2 and 3. Exchange rates between the US Dollar and the Euro ranging from USD 0.90 per Euro to USD 1.50 per Euro are utilised to examine the impact of exchange rate fluctuations (see Appendix 2 and 3).

When the Euro is very weak and the exchange rate is USD 0.90 per Euro, none of the examined EU agricultural products is classified as a sensitive product in the EU proposal, WTO draft proposal, and US proposal. When the Euro is at par with the US Dollar, there are no sensitive products under the EU proposal, and poultry meat is the only sensitive product under the WTO draft proposal, while the US proposal is generating the highest amount of sensitive products – two sensitive products under the lower limit tariff-cut and four sensitive products under the upper limit tariff-cut of the US formula. Poultry meat is the only sensitive product under the EU proposal when the exchange rate is USD 1.10 per Euro. There is a difference in implementing the lower and upper limit tariff-cut of the Draft formula because poultry meat is the only sensitive product under the lower tariff-cut limit and butter is the second sensitive product under the upper tariff-cut limit of the Draft formula. Similarly, when the exchange rate is USD 1.20 per Euro, there are only two sensitive products under the lower tariff-cut limit of the Draft formula, but the amount of sensitive products increases to four under the upper tariff-cut limit of the Draft formula. In addition, the upper tariff-cut limit of the Draft formula and US formula will generate an additional sensitive product – white sugar under the WTO draft proposal and pig meat under the US proposal – when the exchange rate is USD 1.30 per Euro. Lastly, when the exchange rate is USD 1.40 per Euro, the upper tariff-cut limit of the Draft formula will create an additional sensitive product – pig meat. A very strong Euro (USD 1.50 per Euro) and the US proposal will create the greatest amount of sensitive products.

Cereals in the EU have the highest border protection followed by skim milk powder in the EU dairy sector. Cereals are not classified as sensitive products neither in any of the tariff reduction proposals nor under any of the exchange rate scenarios. Skim milk powder is classified as a sensitive product only under the US proposal when the Euro is very strong – USD 1.50 per Euro. On the other hand, poultry meat has the lowest border protection followed by butter. Poultry meat is classified as a sensitive product under the WTO draft proposal in almost all the exchange rate scenarios, except when the Euro is very weak (USD 0.90 per Euro). Likewise, butter is classified as a sensitive product under the US proposal in almost all the exchange rate scenarios with the exception of a very weak Euro (USD 0.90 per Euro).

8 Conclusions

Agricultural trade did not increase as fast as all merchandise trade, resulting in a declining share of agriculture in world trade to less than 10 percent in recent years compare to nearly 40 percent more than half a century ago. This trend of a falling share of agriculture in total merchandise trade is persistent across all income levels and geopolitical groupings, and is consistent with a similar pattern of agriculture capturing a declining share of an economy's income. Paradoxically, agriculture is at the centre stage of the multilateral Doha Round. The protracted progress in the negotiations for agriculture has hindered negotiations on industrial goods and services due to the single undertaking nature of the WTO negotiations. Market access compared to export competition and domestic support is the most difficult of the three pillars to negotiate because of the complexity in bringing together the diverse range of interests involved in the negotiations. The US is aggressively demanding for significant reduction in tariffs, but the EU is unable to lower its tariffs drastically because further tariff reductions will erode border protection for some of its important agricultural products.

In this study, EU agricultural products are examined by tariff lines at eight digit level to reveal the sensitive agricultural products in the EU. These products are butter, skim milk powder, beef meat, poultry meat, pig meat, white sugar, wheat, barley, and maize. A spreadsheet model is used as an analysis tool to complement the various modelling approaches in identifying the sensitive agricultural products of the EU. The spreadsheet projection model is a simple forecasting model that uses a set of projection values from other models to predict possible outcomes. The sensitivity of EU agricultural products is analysed with various exchange rates (USD 0.90 per Euro to USD 1.50 per Euro), different tariff reduction formulas (according to the EU proposal, WTO draft proposal, and US proposal), and the separate tariff-cut limits in the Draft formula and US formula.

Out of the many proposals submitted to the WTO for the tariff reduction formula, the US proposal is the most extreme and the EU proposal is the most lenient with the G-20 proposal and the WTO draft proposal being in the middle. It is natural that the EU proposal will generate a lower number of sensitive products compared to the WTO draft proposal, and the US proposal will generate the highest number of sensitive products.

The results demonstrate that cereals such as wheat, barley, and maize are the most resilient to the erosion of border protection due to further reduction in tariffs in the projected Doha round. In contrast, poultry meat has the weakest border protection in the projected Doha round. The examined EU agricultural products are very sensitive to the fluctuations of exchange rate. In the projected Doha round, there are no sensitive agricultural products in the EU if the Euro is very weak – USD 0.90 per Euro. On the contrary, a very strong Euro (USD 1.50 per Euro) will create the greatest amount of sensitive products in the projected Doha round.

WTO members are entitled to select and designate an appropriate number of sensitive products. Proposals have extended from as little as one percent to as much as fifteen percent of tariff lines. The EU has proposed eight percent of the tariff lines to be designated as sensitive products. In contrast, the US and G-20 group have proposed only one percent of the tariff lines to be designated as sensitive products. The WTO draft proposal estimated that the number of sensitive products may be between four to eight percent of all agricultural tariff lines. Therefore, the EU may be eligible to designate between 88 to 176 tariff lines as sensitive products.

This study has analysed only nine tariff lines out of the 2200 tariff lines for EU agricultural products. The examined EU agricultural products may represent other tariff lines in the same product category, but potential sensitive products at eight digit level have to be analysed individually in order to choose the correct and exact number of sensitive products for the EU.

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APPENDIX 1A

The final bound non ad-valorem MFN duties specified in WTO members' tariff schedules are converted into their ad-valorem equivalents in accordance to the following formula:

$$AVE = (SP * 100)/(UV * XR)$$

AVE: AD VALOREM EQUIVALENT (percent)

SP: MONETARY VALUE OF DUTY PER UNIT OF IMPORTS

UV: IMPORT UNIT VALUE

where $UV = V/(Q * C_Q)$

V = value of imports
Q = quantity of imports
C_Q = conversion factor for quantity units, where appropriate

XR: CURRENCY EXCHANGE RATE, where appropriate

Source: WTO Secretariat

APPENDIX 1B

According to the WTO guidelines for the conversion of specific tariff rates into ad-valorem equivalent rates, world market prices (instead of the "unit value" of imports) will apply for all tariff lines for raw and refined sugar.

The ad-valorem equivalent tariff rate for EU white sugar is calculated by dividing the final bound tariff rate (EUR 419/ton) with the average world market price for white sugar from 1995/1996 to 2000/2001 (see table below).

Ad-valorem equivalent tariff rate for EU white sugar = EUR 419/EUR 251 = 166.93%

Table: World market prices for white sugar from 1995/1996 to 2000/2001.

	1995/1996	**1996/1997**	**1997/1998**	**1998/1999**	**1999/2000**	**2000/2001**	**Average**
USD/ton	396	326	294	228	186	248	
USD/EUR	1.30	1.22	1.10	1.12	1.00	0.90	
EUR/ton	305	268	267	203	186	276	**251**

Source: USDA Sugar and Sweetener Data Tables, author's calculations.

APPENDIX 2

Table: List of EU sensitive products after implementing the *lower* tariff reduction limit specified in the Draft Proposal and US Proposal compared with the EU Proposal.

Lower Limit	**EU Proposal**	**Draft Proposal**	**US Proposal**
Exchange Rate: EUR 1 = USD 1.50	butter beef meat poultry meat pig meat white sugar	butter beef meat poultry meat pig meat white sugar	butter skim milk powder beef meat poultry meat pig meat white sugar
Exchange Rate: EUR 1 = USD 1.40	butter beef meat poultry meat	butter beef meat poultry meat white sugar	butter beef meat poultry meat pig meat white sugar
Exchange Rate: EUR 1 = USD 1.30	butter poultry meat	butter beef meat poultry meat	butter beef meat poultry meat white sugar
Exchange Rate: EUR 1 = USD 1.20	poultry meat	butter poultry meat	butter beef meat poultry meat white sugar
Exchange Rate: EUR 1 = USD 1.10	poultry meat	poultry meat	butter beef meat poultry meat white sugar
Exchange Rate: EUR 1 = USD 1.00	none	poultry meat	butter poultry meat
Exchange Rate: EUR 1 = USD 0.90	none	none	none

APPENDIX 3

Table: List of EU sensitive products after implementing the *upper* tariff reduction limit specified in the Draft Proposal and US Proposal compared with the EU Proposal.

Upper Limit	**EU Proposal**	**Draft Proposal**	**US Proposal**
Exchange Rate: EUR 1 = USD 1.50	butter beef meat poultry meat pig meat white sugar	butter beef meat poultry meat pig meat white sugar	butter skim milk powder beef meat poultry meat pig meat white sugar
Exchange Rate: EUR 1 = USD 1.40	butter beef meat poultry meat	butter beef meat poultry meat **pig meat** white sugar	butter beef meat poultry meat pig meat white sugar
Exchange Rate: EUR 1 = USD 1.30	butter poultry meat	butter beef meat poultry meat **white sugar**	butter beef meat poultry meat **pig meat** white sugar
Exchange Rate: EUR 1 = USD 1.20	poultry meat	butter **beef meat** poultry meat **white sugar**	butter beef meat poultry meat white sugar
Exchange Rate: EUR 1 = USD 1.10	poultry meat	**butter** poultry meat	butter beef meat poultry meat white sugar
Exchange Rate: EUR 1 = USD 1.00	none	poultry meat	butter **beef meat** poultry meat **white sugar**
Exchange Rate: EUR 1 = USD 0.90	none	none	none

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