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Sensitive Agricultural Products in the EU under the Doha Round

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Abstract— EU agricultural products are examined by tariff lines at eight digit level to reveal the sensitive agricultural products in the EU after further tariff reductions in the Doha Round. 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 by using various exchange rates (USD 0.90 to 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. 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.

Keywords— EU, Doha Round, sensitive agricultural products

I. 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. 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. Among 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 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 aim of this study is to estimate the EU's sensitive agricultural products in the 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.

II. 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 sugar¹) are based on OECD-FAO Agricultural Outlook [2] and FAPRI World Agricultural Outlook [3]. 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 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 (examples in Appendix 1, 2 & 3). 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.

The on-going negotiation process in the WTO under the Doha Development Agenda is assumed to be completed by the end of 2008. Hence, the new WTO round is assumed to begin in marketing year 2009/2010 and end in marketing year 2013/2014, over an assumed five-year implementation period (Table 2).

The base year for the five years "linear" reduction in tariffs is 2008/2009, whereby the applied "specific tariff rate" for EU agricultural products in 2008/2009 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).

¹ 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 [1].

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 %

Table 2. Implementation period for the assumed Doha Round.

Base Year	Beginning Year	Ending Year	Implementation Period
2008/2009	2009/2010	2013/2014	5 years

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

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. 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.

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.

III. RESULTS

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 of tariff-cuts (lower and upper scale) in the Draft formula and US formula is shown in Table 4 (lower limit) and Table 5 (upper limit). 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.

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 tariff-cut limit and three sensitive products under the upper tariff-cut limit 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 tariff-cut limit 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, when the exchange rate is USD 1.30 per Euro, 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. Lastly, a very strong Euro (USD 1.50 per Euro) and the US proposal will generate 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).

Table 4. 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.

<i>Lower Limit</i>	EU Proposal	Draft Proposal	US Proposal
Exchange Rate: EUR 1 = USD 1.50	butter beef meat poultry 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

Table 5. 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.

<i>Upper Limit</i>	EU Proposal	Draft Proposal	US Proposal
Exchange Rate: EUR 1 = USD 1.50	butter beef meat poultry 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 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 poultry meat white sugar
Exchange Rate: EUR 1 = USD 0.90	none	none	none

IV. CONCLUSIONS

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. Products designated as “sensitive” may deviate from the otherwise applicable tariff reduction formula. Thus, sensitive products are shielded from the “full force” of the tariff reduction formulas. 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.

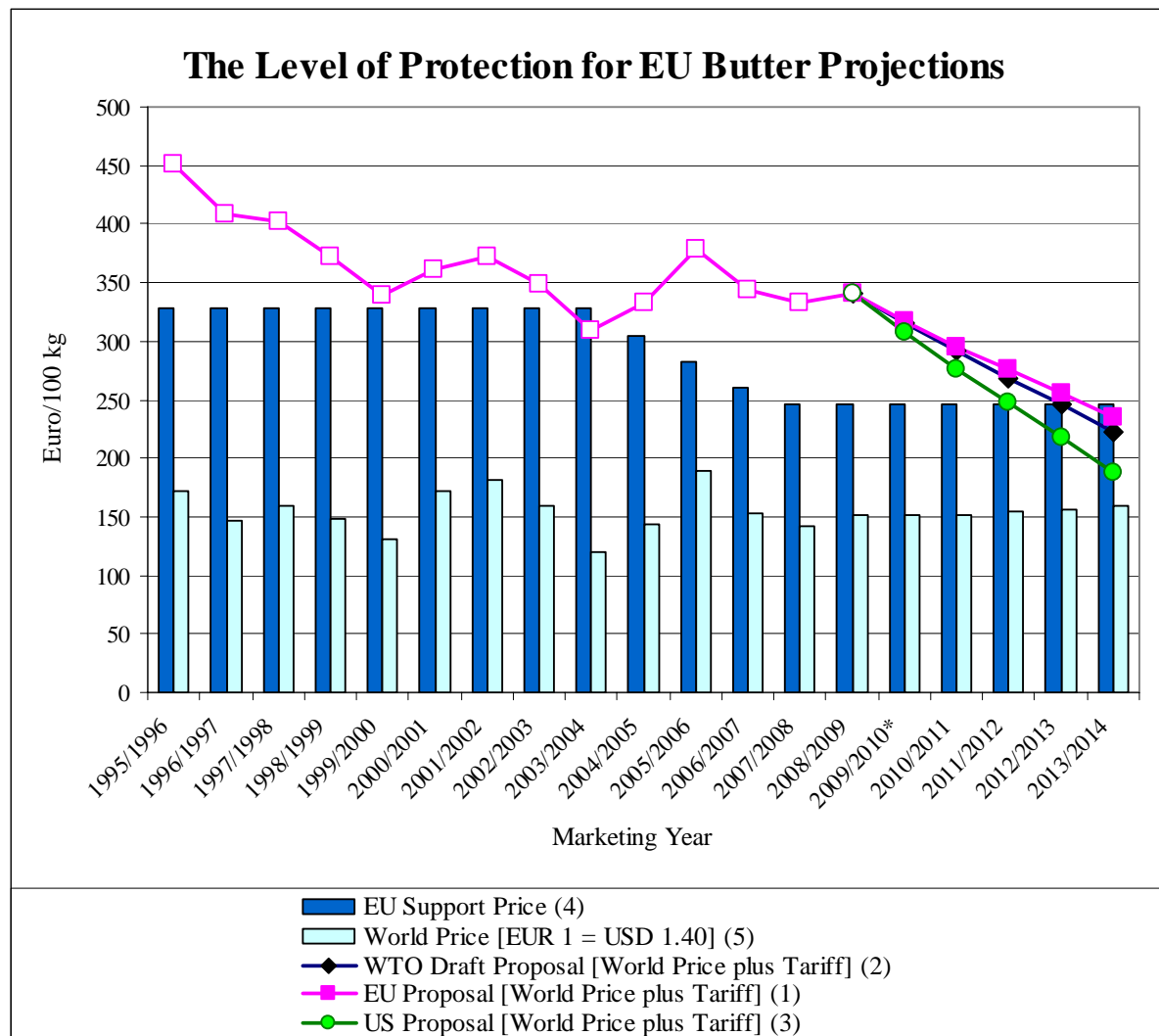
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APPENDIX 1

Projections illustrating the erosion of border protection for EU butter due to tariff cuts under the WTO draft proposal (lower limit), EU proposal, & US proposal (lower limit) and the exchange rate is EUR 1 = USD 1.40.



source: FAPRI World Agricultural Outlook (Commodity Price Projections)

(1) Standard tariff is further reduced by 60% for butter

(2) Standard tariff is further reduced by 66% for butter

(3) Standard tariff is further reduced by 85% for butter

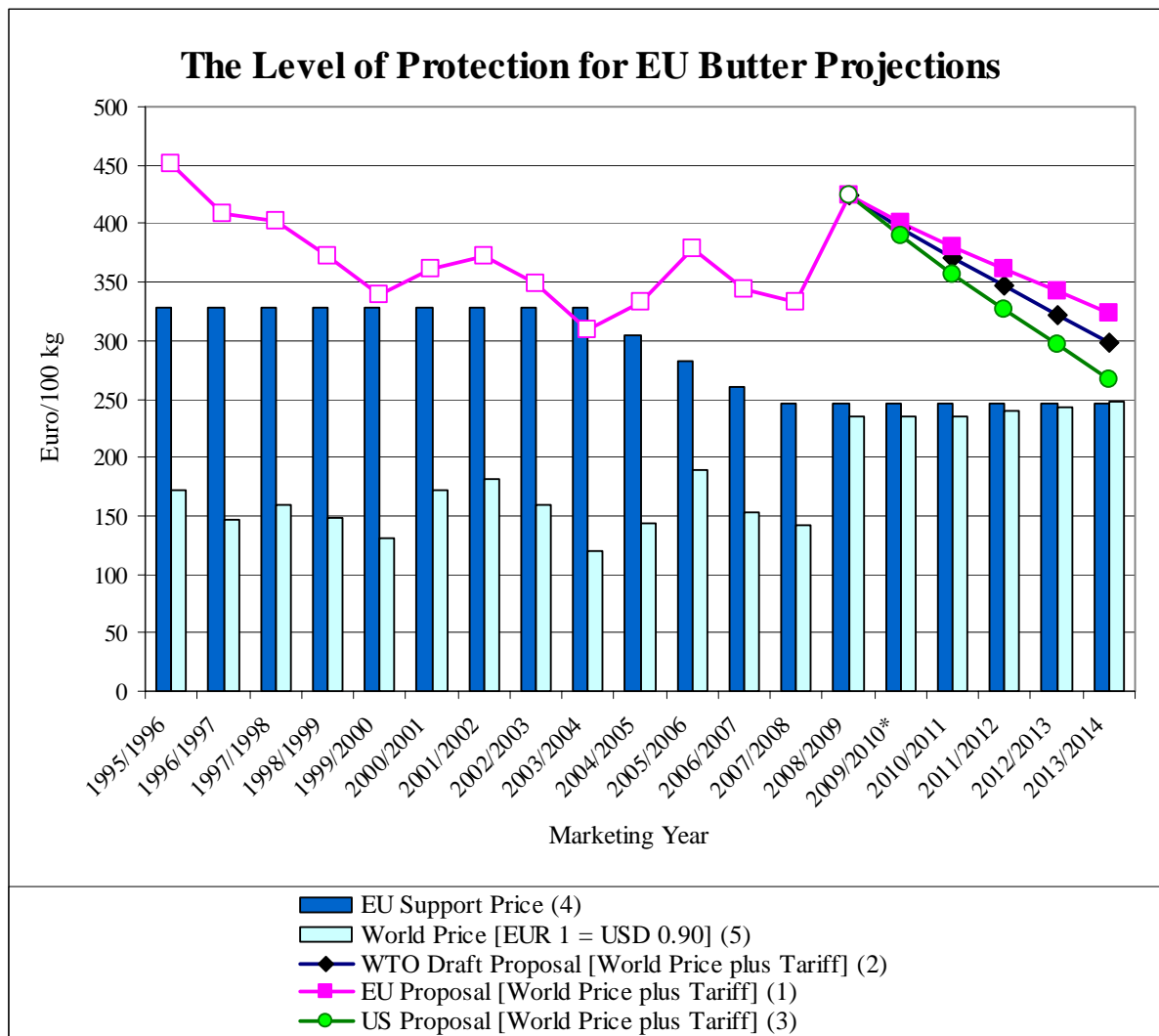
(4) CAP Reform Agreement that reduces butter support price from EUR 3282 per ton in year 2004 to EUR 2463.9 per ton in year 2007

(5) World Price is based on butter, 82% butterfat, Australian Export

* First implementation year for the new WTO round

APPENDIX 2

Projections illustrating the erosion of border protection for EU butter due to tariff cuts under the WTO draft proposal (upper limit), EU proposal, & US proposal (upper limit) and the exchange rate is EUR 1 = USD 0.90.



source: FAPRI World Agricultural Outlook (Commodity Price Projections)

(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

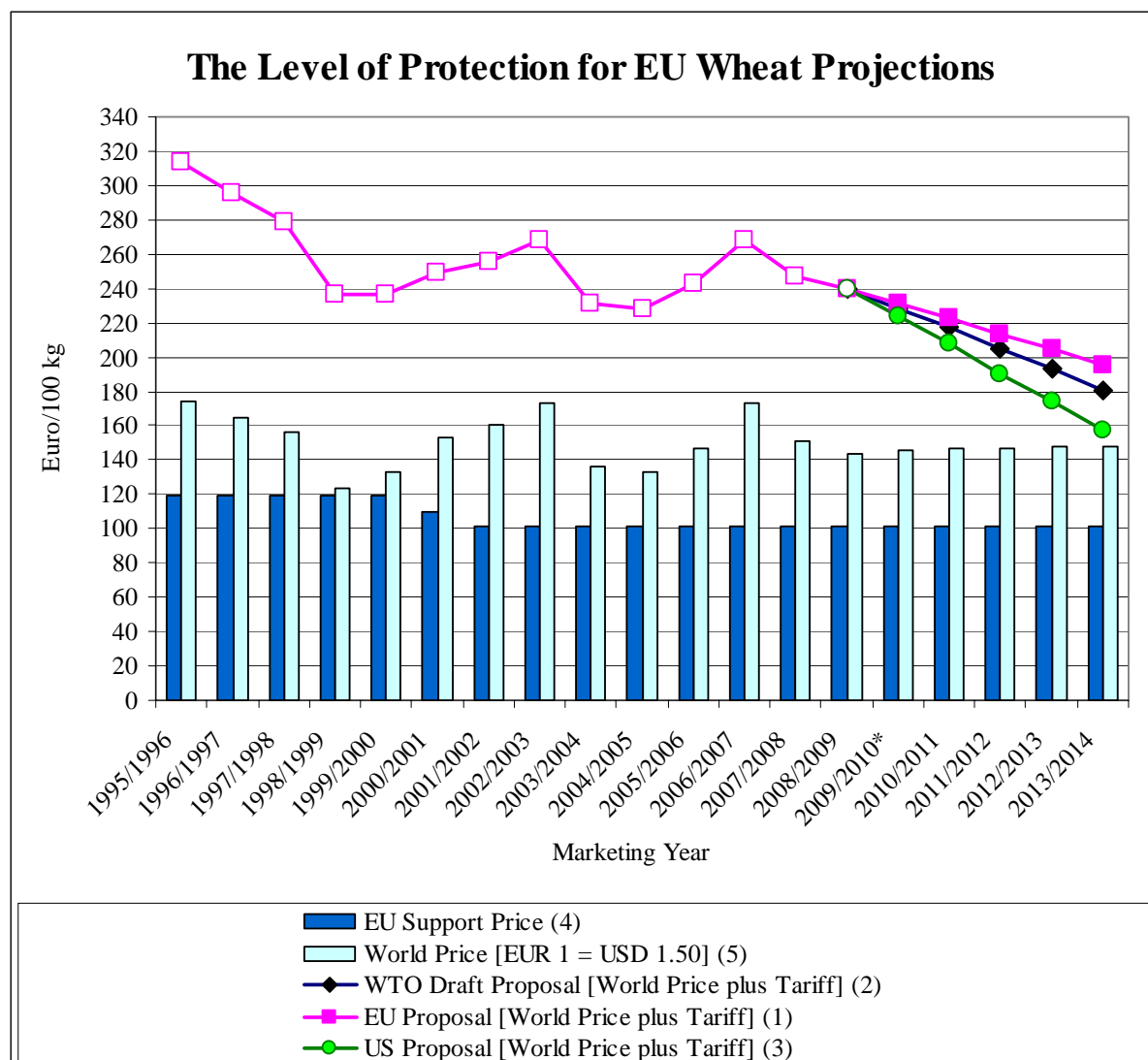
(4) CAP Reform Agreement that reduces butter support price from EUR 3282 per ton in year 2004 to EUR 2463.9 per ton in year 2007

(5) World Price is based on butter, 82% butterfat, Australian Export

* First implementation year for the new WTO round

APPENDIX 3

Projections illustrating the erosion of border protection for EU wheat due to tariff cuts under the WTO draft proposal (upper limit), EU proposal, & US proposal (upper limit) and the exchange rate is EUR 1 = USD 1.50.



source: FAPRI World Agricultural Outlook (Commodity Price Projections)

(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