Free trade area United States of America/European Union Impacts on Brazil^{1,2}

Antônio Salazar P. Brandão³

Abstract – The paper studies the impacts of the elimination of tariffs between the United States and the European Union in the context of negotiations of a free trade agreement. The principal theme of the paper is the impact on Brazil, particularly with respect to agricultural based products. The results show that the effects are small if Brazil does not participate. Nevertheless, if the country fully engages in the negotiations significant efficiency gains will take place with the expansion of important sectors, such as sugar and meats. The results points out to the fact that the negotiations are not likely to be easy since production and exports of sensitive products will be reduced in the three economies.

Keywords: agricultural based sectors, allocative effect, commercial policy, tariff elimination, terms of trade.

Área de livre comércio Estados Unidos/União Europeia: impactos sobre o Brasil

Resumo – O artigo analisa os impactos da eliminação das tarifas entre os Estados Unidos e a União Europeia no contexto da negociação de uma área de livre comércio. O tema principal são implicações para o Brasil e para os produtos de base agropecuária. Conclui-se que a economia brasileira será pouco influenciada se não participar do acordo. Entretanto, caso venha a participar, ganhos alocativos expressivos poderão ser obtidos e setores importantes, como carnes e açúcar, poderão se expandir. A natureza dos resultados indica que as negociações não serão fáceis uma vez que importantes setores das três economias sofrerão reduções em suas produções e exportações.

Palavras-chave: setores de base agropecuária, efeito alocativo, política comercial, eliminação de tarifas, termos de troca.

Introduction

In view of the current negotiations of a free trade area between the United States of America

(USA) and the European Union (EU) this article examines the impacts of tariff reduction between the two regions. The interest in the issue stems

³ Professor da Faculdade de Ciências Econômicas da Universidade do Estado do Rio de Janeiro (UERJ). E-mail: abrandao@firjan.org.br



¹ Original recebido em 19/3/2015 e aprovado em 22/5/2015.

² O autor agradece aos participantes do Seminário da Pós-graduação os comentários a uma versão anterior deste artigo.

from the fact that trade flows between them are very high and, as such, integration is expected to have significant impacts on global economic transactions. Particularly in the case of Brazil the impacts deserve attention from policy makers not only because of the creation of the free trade area itself but also because it can be an opportunity for Brazil to participate in this process of integration.

Negotiations appear to be in a preliminary phase and it is difficult to anticipate how they will evolve and how the final agreement between the parties will look like. Trade between the USA and the EU is mainly composed of manufactured products. On the other hand, Brazil's exports to the EU have a high component of agricultural products and Brazil's exports to the USA are mostly minerals and manufactured goods.

The analysis uses the GTAP (Global Trade Analysis Project) computable general equilibrium model, version 8.1⁴. For the two experiments presented the sectorial and regional aggregations are as follows:

- Sectors: sugar, meat, soy, cereals, dairy products, other agricultural (other_ag), extraction, other manufactured goods (outros_mnf) and others.
- Regions: United States of America (USA); European Union, 27 countries (EU); Brazil (BRA), other countries of MERCOSUR (RMERCOSUR); China (CHN); Other countries in Asia (Asia), Canada and Mexico (CANMEX), other countries of Latin America (ALATINA); Africa; and other countries (others).

The paper is organized as follows: section 2 looks at the implications of tariff elimination between the USA and the EU; section 3 expands the analysis of tariff elimination to include Brazil; section 4 highlights potential policy issues that will be faced by Brazil if the country decides

to engage in the negotiations; and section 4 is summarizes the paper.

Tariff reduction in both regions and impacts on the Brazil

Experiment one consists in the elimination of tariffs on all sectors in the USA and in the EU, without changing subsidies or export taxes. Table 1 shows applied tariffs in both regions. Extremely low values are observed for wood, extraction, other manufactured goods and other products. On the other hand, besides the fact that tariffs are in general high for agricultural products, extremely high values deserve attention. For meat the tariff in the EU is 16.5% and there is a major contrast with the tariff applied by the USA that is only 1.4%. For sugar tariffs are high in both regions, being somewhat smaller in the United States. For milk products tariffs are high, and in the EU the value is two times higher than in the USA. For other ag and cereals values are slightly lower, with higher levels in the EU.

The impacts on production in the two regions are relatively minor. Meat production in

Table 1. Tariffs in the two regions – percent.

	EU	USA
Meat	16.5	1.4
Sugar	11.4	14.0
Dairy	38.0	18.5
Soybean	0.7	1.3
Other_ag	9.7	5.4
Cereals	4.9	3.0
Wood	1.5	0.4
Extraction	0.0	0.0
Other_mnf	2.3	1.1
Other	0.4	0.4

Source: GTAP 8.1 (GTAP..., 2012).

⁴ The structure of the model is presented in Hertel (1997). Further information about the model and changes that were made to the model can be found in the GTAP home page, in particular, at https://www.gtap.agecon.purdue.edu/models/current.asp. For the database and related documentation see Narayanan et al. (2012).



the USA increased 0.7 percent while in the EU production decreased 0.5 percent, these being the largest impacts, in absolute value, observed.

Table 2 shows the impacts on imports in the various regions. Global imports increase by US\$ 26 billion, concentrated in the USA, US\$ 25 billion, and in the EU, US\$ 10 billion. Higher reductions occur in imports by Asia, Canada and Mexico, other countries and China. In the other regions imports decrease, but volumes are low. Global imports in all sectors increase, except for soybeans, cereals and sugar, where trade does not change much.

Among agricultural products, imports of dairy products by the USA increases by US\$ 1.2 billion (46 percent). Other products to mention are imports of meat by the EU and imports of other agricultural products by both regions.

Table 3 shows the effects on aggregate exports. At first it is interesting to note that, despite high tariffs for sugar, there will be little change in exports from both regions. The fact that both exports and imports of this product change very little is due to the fact that tariffs are similar in both regions. Also imports are low and come mostly from third regions which are not affected by the elimination of tariffs.

The major increases in USA exports will occur in meat (9 percent), dairy products (38 percent) and other agricultural products (5.5 percent). The EU also increased exports of dairy products (2 percent), but beef exports decrease (1.2 percent) and changes in other products are not very expressive. The effects on agricultural exports from other regions are small too.

The following are specific observations arising from the analysis of commodity trade matrices (not shown in the paper) in agricultural products:

• Exports of beef from the USA to the EU, to the tune of US\$ 1.5 billion, is accompanied by reduction of US\$ 880 million in exports of beef inside the EU.

- Exports of dairy products from the USA to the EU, to the tune of US\$ 1 billion, is accompanied by a reduction in exports of US\$ 560 million within the EU. At the same time the EU increases its exports to the United States by US\$ 1.5 billion.
- Exports of other agricultural products by the USA to the EU increase by US\$ 2.3 billion; exports of other agricultural products inside the EU decrease by US\$ 1 billion; but exports of this product to the USA increase by US\$ 1.2 billion.

The main results, from the macroeconomic point of view, are the following:

- There is an increase in external saving in the United States, which allows the region to increase the deficit in the current account of the balance of payments by US\$ 4.8 billion, while external savings in the EU decreases to US\$ 168 million. Reductions in external savings are observed in the other regions too. In other words, the opportunities generated in the USA economy led the Global Bank of the model to direct a larger share of world savings for that region. The price of capital goods in the USA has increased while in the other regions they have decreased.
- The equivalent variation for the world economy was positive, but small: US\$ 400 million. The USA had a gain of US\$ of 5.6 billion while all other regions showed losses of well-being. In the case of EU, which experienced a welfare loss of US\$ 180 million, this was caused primarily by terms of trade, since the allocative effect was positive in that region. In the USA the allocative and the terms of trade effect contribute to increase welfare.

The impacts of tariff reduction on average import prices in various sectors and regions are small, except for milk products in the USA. The reduction of tariffs in this sector had a significant



Table 2. Variations in imports in US\$ million – market prices.

Total	578	24	1,794	-10	1,653	40	478	552	15,931	5,201	26,162
Others	-19	<u></u>	ဝှ	-13	-56	-45	-22	-60	-782	-959	-1,967
AFR	-5	0	7	ဇှ	φ	-15	ဇှ	-5	-116	-151	-302
ALATINA	<u></u> ဝ-	7	-5	-7	-18	-32	-7	~	-229	-192	-496
CANMEX	-43	<u>-</u>	-12	<u>_</u>	-85	-25	-34	-37	-1,215	-847	-2,312
Asia	-28	0	-7	-21	-59	-71	ဝှ	-235	-923	-1,208	-2,562
CHN	-16	0	<u>-</u>	-18	-14	0	-5	-125	-335	-204	-715
RMERCOSUR	0	0	0	0	7	0	0	0	-20	-28	-50
BRA	7	0	0	<u>_</u>	4	ဇှ	<u></u>	-5	-156	-143	-313
a	527	10	559	9	932	126	74	32	6,571	1,381	10,218
NSA	170	18	1,268	29	965	26	483	984	13,136	7,553	24,662
	Meat	Sugar	Dairy	Soybean	Other_ag	Cereals	Wood	Extraction	Other_mnf	Other	Total

Source: GTAP 8.1, Experiment 1 (GTAP..., 2012).

Table 3. Variations in exports in US\$ million – fob prices.

Total					1,537						
Outros	-7	0	-276	9	-115	15	29	424	-1,382	1,187	-118
AFR		0	5	2	09-	0	6	40	-86	112	œ
ALATINA	2	2	<u>+</u>	2	-108	2	15	49	-159	197	-7
CANMEX	39	~	09-	-5	-103	18	139	190	-1,603	852	-529
Asia	-1	<u>-</u>	-44	16	-108	12	48	13	-1,623	2,167	468
CHN	ဇှ	0	ဖ ှ	_	-20	6	106	9	-981	1,000	81
RMERCOSUR	-12	0	-12	19	41-	7	က	~	~	40	28
BRA	-13	2	ကု	27	-27	-16	19	o	7	160	169
급	-759	<u>-</u>	899	45	115	-138	o	-19	5,861	4,175	10.188
NSA	1,290	4	1,001	-116	2,007	81	52	-122	15,544	-4,526	15.225
	Meat	Sugar	Dairy	Soybean	Other_ag	Cereals	Wood	Extraction	Other_mnf	Other	Total

Fonte: GTAP 8.1, Experiment 1 (GTAP..., 2012).



impact on imports from the EU and, in consequence, the average price of imports decreased 10 percent.

Tariff reduction in the two regions and in Brazil

The previous experiment showed that tariff liberalization between the United States and the European Union has small impacts on Brazil, particularly on agricultural sectors. Nevertheless, if Brazil becomes part of the negotiations, tariff reduction among the three partners can bring substantial regional gains but also the efficiency of the world economy as a whole will increase, as the results of the next experiment reveal.

Experiment two consists in the elimination of tariffs on all sectors in trade among BRA, USA and EU. Table 4 shows applied tariffs in the EU and in the USA with respect to imports from Brazil. Applied tariffs for agricultural goods are high in both regions, particularly in the EU. On the other hand, as shown in Table 5, the highest applied rates in Brazil fall on industrialized products. The tariff practiced by Brazil for dairy products is also quite high.

This experiment indicates significant variations in production of some products, mainly in

Table 4. Applied tariffs in relation to Brazil – percent.

	EU	USA
Meat	49.9	1.2
Sugar	135.5	34.9
Dairy	8.5	21.8
Soybean	0.2	0.8
Other_ag	6.3	10.0
Cereals	2.8	0.6
Wood	2.1	0.8
Extraction	0.0	0.0
Other_mnf	1.2	0.7
Other	0.9	1.2

Source: GTAP 8.1 (GTAP..., 2012).

Table 5. Tariffs applied by Brazil – percent.

	EU	USA
Meat	6.3	3.8
Sugar	5.9	15.5
Dairy	20.5	22.0
Soybean	10.1	10.3
Other_ag	9.7	10.6
Cereals	7.7	5.0
Wood	16.3	16.0
Extraction	2.5	0.1
Other_mnf	11.1	8.9
Other	1.8	2.3

Source: GTAP 8.1 (GTAP..., 2012).

the European Union and Brazil (Table 6). Important reallocation occurs in world production of meat and sugar and some relocation also takes place in the production of the soybean sector. In Brazil meat production increases 38 percent and sugar production increases 24 percent. At the same time reductions in production of soybeans (8 percent), wood (5 percent), extraction (3 percent) and other manufactured goods (6 percent) are observed. Note also the expansion of 2 percent in the production of other agricultural products which includes two important export

Table 6. Percentage change in production.

	USA	EU	BRA
Meat	0.4	-8.3	38.0
Sugar	-1.3	-20.3	24.4
Dairy	-0.1	0.2	-1.2
Soybean	0.2	1.5	-8.0
Other_ag	0.3	-0.4	2.3
Cereals	0.2	-1.6	0.1
Wood	-0.1	0.2	-5.1
Extraction	-0.1	0.1	-3.3
Other_mnf	0.3	0.4	-6.0
Other	0.0	0.1	-0.5

Source: GTAP 8.1, Experiment 2 (GTAP..., 2012).



products for Brazil: coffee and orange juice. In the EU meat and sugar production decrease 8 and 20 percent respectively. The USA sugar production decreases by 1 percent.

Production in most other regions and in most sectors, not shown in the Table 6, does not change significantly. However, sugar production in Africa and in other countries of Latin America decrease 3 and 2 percent respectively. Meat production in other Mercosur countries decreases by approximately 2 percent. Soybean production increases 1.5 percent in other Mercosur countries.

Significant variations in prices, as shown in Table 7, will take place. Market prices of all products in Brazil increase; the only exception being the extractive industry where there is a slight negative variation. The increase in domestic prices of manufactured products is inferior to that of other products. This is a consequence of the fact that the removal of high tariffs in Brazil caused reduction of about 5 percent in average prices of imports, resulting in substitution of domestic production by imports both in consumption and in use by other sectors.

The average import price shows a large reduction in both the USA and the EU. In the

latter there is also a high reduction in the price of imported meat. In Brazil dairy products, wood and manufactured goods experience large reductions.

Table 8 shows increases in imports in all three regions included in the agreement. The increase in Brazil is of the order of 14 percent; there is a small increase in imports by the USA compared to experiment one; and imports by the EU increase by 150 percent compared to *Experiment one*. Imports of regions that do not participate in the agreement are reduced, but world imports increase by US\$ 60 billion or 130 percent when compared to *Experiment one*.

Table 9 shows that exports increase in all three regions involved in the deal but also in Asia and in China. The increases in Brazil will be concentrated in meats (157 percent) and sugar (91 percent), while reductions occur in all other products, except other agricultural products where the variation is practically zero. The main destination of Brazilian agricultural exports is the EU.

Table 10, shows that the increase in exports of meat from Brazil to the European Union will be of the order of \$ 20 billion, while EU exports to the EU itself will decrease by about

Table 7. Percent variation in prices.

_	Variations i	n market prices production	of domestic	Variations	in average prices	s of imports
_	USA	EU	BRA	USA	EU	BRA
Meat	0.18	-0.81	5.94	-0.22	-7.11	-2.53
Sugar	-0.31	-0.59	5.04	-5.02	-20.97	-2.57
Dairy	0.05	-0.39	4.31	-10.19	-0.81	-8.67
Soybean	0.22	-0.21	4.00	-0.39	0.30	-3.92
Other_ag	0.15	-0.39	4.43	-0.97	-0.64	-2.83
Cereals	0.21	-0.60	4.93	-0.23	-0.62	-0.22
Wood	0.15	-0.20	3.26	-0.17	-0.21	-8.55
Extraction	-0.05	-0.13	-0.14	-0.16	-0.16	-0.18
Other_mnf	0.08	-0.22	1.92	-0.47	-0.32	-5.49
Other	0.17	-0.20	3.68	-0.31	-0.2	-1.19

Source: GTAP 8.1, Experiment 2 (GTAP..., 2012).



Table 8. Variations in imports in US\$ million – market prices.

	NSA	E	BRA	RMERCOSUR	CHN	Asia	CANMEX	ALATINA	AFR	Others	Total
Meat	142	10,364	124	-20	-38	-178	-55	-109	-73	-719	9,437
Sugar	166	4,110	~	-5	<u>-</u>	-43	-21	4	-106	-364	3,698
Dairy	1,304	502	140	-5	_	2	<u></u>	-17	9	œ	1,923
Soybean	89	-256	122	4	-269	-112	0	-25	-27	-102	-596
Other_ag	1,307	4	473	-46	-42	-147	-120	-71	-31	-65	1,263
Cereals	27	-318	312	-5	0	-103	-30	-53	-34	-93	-294
Wood	497	101	207	-18	-14	-22	-45	-40	-15	-29	623
Extraction	1,452	1,554	-727	-47	-257	-398	-30	0	6	-97	1,467
Other_mnf	14,584	9,498	16,058	869-	-534	-1,479	-1,542	-780	-333	-1,127	33,647
Other	8,760	151	6,271	-347	-353	-1,766	-1,078	-611	-334	-1,382	9,310
Total	28,308	25,710	22,981	-1,178	-1,508	-4,246	-2,930	-1,738	-949	-3,971	60,478

Source: GTAP 8.1, Experiment 2 (GTAP..., 2012).

Table 9. Variations in exports in US\$ million – fob prices.

Total	4,248	1,848	1,583	-356	1,149	-217	572	1,470	31,705	10,987	52,989
Outros	-592	-209	-312	130	-306	18	53	1,086	-2,206	1,988	-350
AFR	-64	-316	ς	24	-128	0	26	93	7	276	-87
ALATINA	-50	-240	ဝှ	25	-173	က	39	116	-474	539	-225
CANMEX	49	-56	-62	61	-210	24	211	222	-1,646	1,099	-308
Asia	-201	21	-49	311	-224	4	88	62	-2,574	4,046	1,485
CHN	-121	-	φ	16	-102	13	193	21	-1,677	1,876	210
RMERCOSUR	-216	-5	-23	276	25	157	<u>\</u>	132	-1,226	375	-506
BRA	17,720	4,585	-53	-1,848	70	-387	-524	-57	-6,423	-7,447	5,637
品	-13,072	-1,941	1,106	267	168	-120	412	-46	27,744	13,011	27,829
NSA	795	o	866	84	2,028	69	74	-159	20,181	-4,776	19,305
	Meat	Sugar	Dairy	Soybean	Other_ag	Cereals	Wood	Extraction	Other_mnf	Other	Total

Source: GTAP 8.2, Experiment 2 (GTAP..., 2012).



Table 10. Variations in world meat exports/imports in US\$ million – fob prices.

	NSA	E	BRA	RMERCOSUR	CHN	Asia	CANMEX	ALATINA	AFR	Others	Total
NSA	0	816	22	~	-25	-38	-49	4	2	52	794
EU	147	-14,049	28	4	36	178	80	6	49	209	-13,051
BRA	-115	20,281	0	-32	-64	-516	-20	-187	-154	-1,471	17,720
RMERCOSUR	10	-357	25	က	4	4	2	29	7	28	-216
CHN	9	-186	ဗ	~	0	37	0	_	7	15	-121
Asia	2	-287	~	0	_	31	_	0	9	44	-201
CANMEX	29	-79	0	0	2	28	က	9	7	56	49
ALATINA	က	-118	2	7	_	10	4	42	0	2	-20
AFR	_	-117	~	0	_	က	0	0	22	24	-64
Others	27	-923	2	~	6	78	9	က	9	198	-593
Total	139	4,983	114	-19	-36	-186	-45	-83	-58	-540	4,268

Source: GTAP 8.1, Experiment 2 (GTAP..., 2012)

\$ 14 billion. The USA also increases exports to the EU by about US\$ 800 million, representing more than twice the value of exports before the reduction of tariffs.

Table 11 shows that Brazilian exports of sugar to the EU increase by about US\$ 5 billion while exports of sugar within the EU decrease US\$ 2 billion.

In the case of meat and sugar, the effects on exports from Brazil are very high. These demand stimuli explain, to a large extent, the significant increases in production of these sectors shown in Table 6, as well as explain the reductions in production of other sectors. Larger quantities of land, labor and capital are employed in these sectors and, as a result of the resource constraint of the economy, reduction in the use of these factors takes place in other sectors.

The following are comments on the macroeconomic effects of this tariff liberalization:

- In the USA and Brazil foreign savings increase, leading to an increase in the current account deficit of the balance of payments of US\$ 3 billion and US\$ 10 billion respectively. In all other regions foreign savings are reduced. The price of capital goods increases approximately 2 percent in Brazil and virtually no change takes place in the USA. In other regions there are reductions on the order of 0.2 percent in prices of capital goods.
- The equivalent variation for the world economy was around US\$ 8 billion, indicating that the entry of Brazil in the agreement contributes greatly to global economic efficiency. In the USA the equivalent variation was US\$ 6.6 billion; in the EU it was US\$ 3.5 billion and in Brazil it was US\$ 5.9 billion. With the entry of Brazil in the agreement the equivalent variation in the EU becomes positive, a fact that does not occur in the previous experiment where only the two regions eliminate tariffs. The EU gain is entirely based on allocative effect once



Table 11. Variations in world sugar exports/imports in US\$ million – fob prices.

	NSA	В	BRA	RMERCOSUR	CHN	Asia	CANMEX	ALATINA	AFR	Others	Total
NSA	0	-5	0	0	0	0	6	_	0	က	တ
EU	6	-2,023	0	0	0	_	~	_	10	136	-1,864
BRA	267	5,103	0	ဇှ	4	-80	-38	-50	-143	-468	4,585
RMERCOSUR	9	2-	0	~	0	0	0	2	_	4	ιç
CHN	0	-5	0	0	0	0	0	0	0	_	7
Asia	-14	-62	0	0	~	20	0	0	13	63	21
CANMEX	-40	-18	0	0	0	0	0	0	0	~	-56
ALATINA	-62	-219	0	0	7	ဇ	9	17	_	7	-240
AFR	9	-355	0	0	0	4	0	0	36	2	-316
Others	-13	-290	0	0	0	12	0	0	7	20	-209
Total	136	2,122	-	۲-	7	-39	-20	-28	-71	-175	1,924
Source: GTAP 8.1, Experiment 2 (GTAP, 2012).	riment 2 (GTAF	۰, 2012).									

the terms of trade moves against the region.

Implications for the Brazilian trade strategy

The analysis of the results of experiments performed above gives indications that may contribute to the Brazilian trade policy formulation.

Firstly it is clear that Brazil should attempt to integrate the free trade area USA / EU. The negotiations between the parties appear to be in an initial stage and it is difficult to foresee what will be in the final agreement. Nevertheless, the potential for expanding trade and income is expressive and shouldn't be ignored.

But Mercosur can be a major barrier since the existence of the common external tariff prevents member states to conclude agreements individually. A possibility that should be explored with the other members is to abandon the idea of a Customs Union in the region, keeping only the free trade area. Thus member countries would be free to negotiate individual agreements with other countries or regions.

The results also show that the negotiations will continue to be difficult. In the two experiments a reduction in trade in certain agricultural basic products within the EU will take place. In Experiment one meat exports in the EU decreased by around US\$ 900 million, which indicates that there may be resistance to the reduction of tariffs in this sector on the part of some EU member countries. Exports of dairy products and other agricultural products within the EU will also be reduced. In all cases increases in USA exports will be higher than the reductions in trade within the EU. In Experiment two the same type of adjustment for meats and sugar take place, but the reductions in exports within the EU will be in higher volumes: US\$ 14 billion for meats and US\$ 2 billion for dairy products, values that correspond to 27 percent and 55 percent respectively of the initial volume. The main supplier of these products will be Brazil.



Resistance is also likely to be found in the USA. Production of sugar is reduced by 1.3 percent and imports of dairy products, other agricultural products, extraction and wood are relatively large and interested parties may resist tariff reduction.

The difficulties in the negotiations for the Brazil will also be significant. The elimination of tariffs will lead to increases in production and exports of meat and sugar. However, soybean, manufacture, wood and extractive producers will likely resist to the agreement as significant reductions in production will take place.

Summary and limitations

The article examined the impacts of tariff liberalization between the United States and the European Union, with special attention to the consequences on Brazil and on agricultural commodities. The repercussions on Brazil were not significant. However, if Brazil becomes part of the agreement, eliminating tariffs and with tariff-free access to the markets of those regions, there are effects of greater significance to Brazil and to the other members of the agreement.

Despite the favorable effects, one can foresee difficulties in negotiations in all three regions since several sectors will be affected negatively both in relation to production and to exports. In Brazil the main resistances are likely to be in manufactured goods which have higher tariffs than the other two regions. But reductions in production and exports of soybeans, wood and extractive industry are likely to induce opposition from interested parties in Brazil. In the

European Union there will be a reduction in trade among member countries, mainly in meat and in sugar. In the United States there will be reduction of sugar and dairy production and imports will increase.

Many uncertainties still surround the negotiations between the USA and the EU and one can't predict how this will evolve, but the scenario of complete elimination of tariffs will not come true. Many other aspects that are on the negotiating table between the parties, as are the cases of export subsidies, domestic support measures and non-tariff barriers were not considered in the analysis. Nevertheless, the results here may be useful for Brazilian policy makers as they formulate and negotiate with the private sector the country's offers.

One message to be highlighted is that the country should strive to be part of a possible agreement between the European Union and the United States, even if this means that the clauses that make the Mercosur a Customs Union must be reviewed.

References

GTAP data bases: GTAP 8. [2012]. Available at: https://www.gtap.agecon.purdue.edu/databases/default.asp. Access: July 30th 2013.

HERTEL, T. W. (Ed.). **Global trade analysis**: modeling and applications. New York: Cambridge University, 1997.

NARAYANAN, G.; BADRI, A. A.; MCDOUGALL, R. (Ed.). **Global trade, assistance, and production**: the GTAP 8 data base. West Lafayette: Purdue University, Center for Global Trade Analysis, 2012. Available at: https://www.gtap.agecon.purdue.edu/databases/v8/v8_doco.asp. Access: July 30th 2013.

