

## **IMPACTS OF FTAA AND MERCOEURO ON AGRIBUSINESS IN THE MERCOSUL COUNTRIES<sup>1</sup>**

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<sup>1</sup> Contributed paper selected for presentation at the 25<sup>th</sup> International Conference of Agricultural Economists, August 16-22, 2003, Durban, South Africa. The authors are grateful to Christopher Fields for helpful comments and English editing.

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# **IMPACTS OF FTAA AND MERCOEURO ON AGRIBUSINESS IN THE MERCOSUL COUNTRIES**

## **Abstract**

Focusing on changes in agricultural policy, this paper examines the economic impacts on MERCOSUL member country economies arising from the creation of the Free Trade Area of the Americas (FTAA) and a free trade area between MERCOSUL and the European Union (MERCOEURO). Four simulations are run using the Global Trade Analysis Project's (GTAP) applied general equilibrium model. The results suggest these new trade alliances would cause an increase in MERCOSUL agribusiness production and a decrease in manufactures production. In all scenarios, agricultural trade flows are greatly altered, expanding MERCOSUL agribusiness exports. Economic growth for the MERCOSUL countries increases only in the MERCOEURO scenarios. The elimination of agriculture production and export subsidies by members of the North American Free Trade Area (NAFTA) and European Union (E.U.) has strong economic impacts on the MERCOSUL member countries.

Key words: FTAA, MERCOEURO, Agribusiness, MERCOSUL, GTAP

## **1. Introduction**

Two new opportunities to create free trade areas are open to the countries of the Common Market of the South (MERCOSUL). One is the Free Trade Area of the Americas (FTAA), which would liberalize trade between MERCOSUL, the North America Free Trade Area (NAFTA), and all the other countries in the Americas. The other is a free trade area formed by MERCOSUL and the European Union (E.U.): MERCOEURO. The objective of this paper is to determine the impacts of FTAA and MERCOEURO on the MERCOSUL economies both with and without agribusiness production and export subsidies.

Agricultural policy has often been an area of controversy in multi-country trade discussions. The U.S. and the E.U. protect their agriculture sectors with import tariffs and heavy production and export subsidies, yet agriculture is an important source of export earnings and economic growth for the MERCOSUL countries. The economic impacts of these free trade areas on agribusiness, trade flow, economic growth, and welfare in the MERCOSUL countries is not well known.

International trade theory states that the formation of a free trade area improves welfare for the member countries if the total volume of trade increases inside the area: if trade creation among the members exceeds the diversion of trade away from non-

member countries (Krugman e Obstfeld, 2000). A country gains if its high cost domestic production is substituted for by lower cost imports from other members of the new economic block. But, if participation in the free trade area leads to substitution of low cost imports from non-members for high cost goods from members, the country loses welfare.

This paper next discusses the GTAP model, the data, and the analytical scenarios; after that, the results and conclusions are presented in detail.

## **2. GTAP model, data and analytical scenarios**

This study employs the Global Trade Analysis Project's (GTAP) applied general equilibrium model (AGE) to investigate all the markets as well as the influences of one market on the others. The Global Trade Analysis Project (GTAP), developed by Hertel and Tsigas (1997), includes a complete general equilibrium model to analyze policy reform and trade, a software developed by Codsí and Pearson (1988) to run the simulations, and a large data base in its 5th version, that contains data on 66 countries and 57 commodities. The regional aggregation used in this analysis is shown in Table 1. The economies of Brazil, Argentina, and Uruguay represent MERCOSUL. This aggregation excludes the MERCOSUL countries Paraguay and Bolivia because they do not individually take part in the database. Also, Chile, a MERCOSUL associated member, is not examined because its tariff system is lower than that of MERCOSUL's Common External Tariff (CET). Imposing on Chile a higher tariff to conform to the CET would shift trade out of the country with negative impact on its economy. The GTAP database reflects the economic environment of 1997 and includes the input-output (IO) matrices of the considered regions.

### *2.1. Analytical scenarios*

In the GTAP Version 5 data base, U.S. and E.U. subsidies to agricultural production and exports are excluded; however, those subsidies exist and have grown due to the recently passed 2002 United States Farm Bill. This study addresses this lack by using U.S. and E.U. subsidy data included in the GTAP Version 4 data base.

Before simulating the FTAA and MERCOEURO free trade areas, agricultural production and export subsidies and import tariffs for trade among the MERCOSUL countries are eliminated from the data base. MERCOSUL's Common External Tariff (CET) applied at 8.0 % to corn; 10.0 % to rice, wheat, soybean, meat, and other agribusiness; at 16.0 % to sugar, and milk; and at 18.0 % to manufactures, a

characteristic of the custom union, is implemented. MERCOSUL's taxes on the export of primary and semi-manufactured goods are also eliminated, particularly the ICMS tax in Brazil, thus imposing Kandir's Law of 1996. As they are not in GTAP's database, the inclusion of MERCOSUL's CET and the impacts of Brazil's Kandir Law make the scenarios more realistic.

Two scenarios are simulated and then analyzed for each free trade area: FTAA 1 and 2 and MERCOEURO 1 and 2. Scenario FTAA 1 simulates the creation of a free trade area made up of all the countries in the Americas by imposing zero import tariffs on goods traded between member countries. The countries of NAFTA and the other non-MERCOSUL countries of Americas apply their tariffs only to goods from non-FTAA members. MERCOSUL countries apply their CET only to goods from non-FTAA members.

Scenario FTAA 2 is the same as FTAA 1 except that it also simulates total elimination of subsidies to agricultural production and exportation by the member countries. This is expected to have a great impact on production and exports of agricultural products by the NAFTA countries, given that the United States offers strong protection to that sector. By eliminating these subsidies in this scenario, a comparison between it and the FTAA 1 scenario makes possible an analysis of the impacts of this strong agricultural assistance, mostly by the NAFTA countries, on the FTAA member countries' economies.

Scenario MERCOEURO 1 simulates the creation of a free trade area between members of MERCOSUL and European Union, imposing zero tariffs on commerce between MERCOEURO member countries. In this scenario, the European Union retains its tariffs on products from non-MERCOEURO countries and the MERCOSUL countries retain their CET on products from non-MERCOEURO countries.

The last scenario, MERCOEURO 2, is the same as MERCOEURO 1 except that the European Union's subsidies to agricultural production and exports are also eliminated. This is expected to have a great impact on the production and exports of agricultural products by the European Union. By comparing the effects of this scenario with those of MERCOEURO 1, an analysis of the trade distortions arising from the strong European Union subsidies to agricultural production and exports is permitted.

Scenarios FTAA 2 and MERCOEURO 2 are considered extreme, since elimination of subsidies to agricultural production and exports by the United States and the European Union would generate exceedingly negative reactions by the agricultural

lobbies in the affected countries. When negotiating the creation of a free trade area with either the U.S. or the European Union, it is evident that the MERCOSUL countries should seek elimination of all distortions to trade among member countries.

### **3. Results**

It is important to highlight that NAFTA and the European Union (E.U.) are major producers of most of the agricultural commodities addressed in this study, demonstrating the economic force these blocks wield. Though the MERCOSUL block is a less significant producer, Brazil itself is a relatively important international producer of rice, soybeans, sugar, milk, meats, other agribusiness (OAgribusiness), and manufactures, Argentina produces considerable meat and soybean, and Uruguay can be highlighted for its meat production .

No significant agricultural production subsidy is observed in the MERCOSUL countries; however, NAFTA and the European Union apply large subsidies to assist the production of agricultural products. According to GTAP, the average production subsidies offered by NAFTA to the studied agricultural commodities are 15% to rice, 18% to wheat, 10% to corn, 4% to soya and 2% to sugar, milk and meats. In the E.U., the production subsidies are larger: 58% to wheat, 53% to corn, 9% to soya, and 4% to meats, milk and OAgribusiness.

Distortions in trade, in terms of subsidies to exports and tariffs on imports, are strongly practiced by NAFTA and the European Union. According to GTAP data, the NAFTA offers a 60% subsidy to sugar exports and a 59% subsidy to milk exports. In the European Union, that export subsidy is greater, reaching 116% for milk, 76% for sugar, 44% for corn, and 33% for meats. In regards to agricultural product imports, NAFTA applies import tariffs of 53% on sugar, 49% on milk, 5% on rice, 4% on meats, and around 13% on wheat, soya, and OAgribusiness. The European Union applies even higher agricultural product tariffs: 86% on milk, 76% on sugar, 85% on rice, 70% on meats, 60% on wheat, 39% on corn, 10% on soya, and 17% on OAgribusiness. Regarding the MERCOSUL countries, Uruguay offers an average subsidy of 6% to exported agricultural products while Brazil and Argentina have no export subsidies. These three countries apply MERCOSUL's Common External Tariff (CET).

#### *3.1. Impacts on production and trade flow*

##### *3.1.1. Scenario FTAA 1*

In this scenario, the creation of the Free Trade Area of the Americas (FTAA)

was simulated with the elimination of import tariffs and maintenance of agricultural production and export subsidies among member countries.

Table 2 shows the percentile variations in production, exportation, and importation that resulted from the simulated changes brought about in this scenario. In general, there was a fall in the production of agribusiness products within NAFTA and an increase in the MERCOSUL countries. Similar behavior is observed in the percentile variation of these products' exportation.

Sugar is the product most sensitive to the elimination of import tariffs within FTAA. Sugar production fell 11.03%, in NAFTA, a direct reaction to the elimination of tariffs. The end of tariff protection reveals this NAFTA commodity's lack of competitiveness in the international market. In this scenario, sugar importation by the NAFTA countries increases 54.7%, to meet internal demand, and sugar exportation decreases 11.16%. Brazil, a traditional sugar producer and exporter, benefits by the removal of sugar import tariffs. In this scenario, Brazilian sugar production increases 2.14% and exportation increases 13.68%.

The imposition of this scenario's conditions causes other MERCOSUL agricultural products to become more internationally competitive as shown by the increase in exportation of soybeans, meats, milk, and OAgribusiness from Argentina, OAgribusiness products from Brazil, and meats and milk from Uruguay.

There is also a fall observed in production of manufactures by the MERCOSUL countries and a small elevation in the NAFTA countries (0.30%). It was also found that there is an increase in all manufactures commerce in this scenario. In NAFTA, the increase in the export of manufactures was greater than the increase in their import, while just the opposite occurred in MERCOSUL. In Argentina, Brazil, and Uruguay, the increase in manufactures importation was greater than the increase in their exportation.

This scenario gives evidence of the competitiveness enjoyed by MERCOSUL countries' agribusiness products, while this characteristic belongs to NAFTA in the realm of manufactured products.

### 3.1.2. *Scenario FTAA 2*

In this scenario, the formation of the Free Trade Area of the Americas it is again simulated with the elimination of tariff protection and, differentiating this scenario from the previous scenario, the total elimination of subsidies to agricultural production and

exports.

As expected, the elimination of production and export subsidies reinforced the generalized fall in NAFTA agribusiness production observed in Scenario FTAA 1 (Table 3). The most sensitive NAFTA product remains sugar, the production of which fell 14.2%. Significant production decreases were also observed in the NAFTA countries production of wheat (-13.78%), rice (-11.11%), and soybean (-5.54%). In the MERCOSUL countries, the elimination of tariffs and subsidies resulted in a generalized increase in the agribusiness production, having significant impacts on the production of Argentine wheat, corn, and soybean; Brazilian soybean, sugar, and OAgribusiness; and Uruguayan milk and meats.

The trade liberalization simulated in this scenario caused E.U. production of rice, wheat, and corn to elevate. This may be due to the retention of the European Union's common agricultural policy, which provides a high level of agricultural protection.

Regarding trade, the impacts of scenario FTAA 1 are enhanced with elimination of subsidies in scenario FTAA 2. The effects of the end of export subsidies are clearly shown by the expressive falls in exportation of agricultural goods by the NAFTA countries and the increased exportation of these commodities by the MERCOSUL countries. In NAFTA, sugar remains the commodity most impacted by the conditions simulated in Scenario FTAA 2, which caused NAFTA sugar exports to fall 54.66% and sugar imports to increase 55.4%. In MERCOSUL's countries, the greatest impacts on exportation were felt in Brazil, as the exportation of all agricultural products increased extraordinarily.

The impacts of scenario FTAA 2 affected importation by the MERCOSUL countries in a differentiated manner, with a fall in the importation of a majority of products by Brazil and an increase in the level of importation by Argentina and Uruguay. In Brazil, the elevation of manufactured product exportation (27.5%) was greater than the increase in their importation (11.54%), which can mean that Brazil's trade balance improved.

In general, the elimination of tariffs and subsidies to production and export simulated in scenario FTAA 2 reinforced the effects of Scenario FTAA 1, in which only import tariffs were eliminated. In comparative terms, the variations were similar between the two scenarios; however, they were of greater intensity in scenario FTAA 2. This reinforces the competitiveness of the MERCOSUL countries in agribusiness and

emphasizes the negative impacts on MERCOSUL production and trade caused the NAFTA countries' high tariffs and subsidies.

### *3.1.3. Scenario MERCOEURO 1*

In this scenario, the formation of a free trade area between MERCOSUL and European Union was simulated with the elimination of the import tariffs between countries in these two trade blocks.

The effect of this scenario is a generalized fall in European Union production of all agribusiness products and a small increase in the E.U's. output of manufactures and services, while there is generalized percentile growth in the production of Brazilian and Argentine agribusiness products and an almost universal fall in Uruguayan agricultural production. This scenario most influences the meats complex, with production falling in the European Union by 4.19% and production significantly elevating in Argentina, Brazil, and Uruguay, 25.94%, 7.4% and 46.34% respectively. Also highlighted is the elevation of corn and milk production in Argentina (5.99% and 10.48%), and soybean, sugar, and OAgribusiness production in Brazil (3.19%, 3.34% and 1.09%). The production of manufactures grows slightly in the European Union (0.45%) and falls significantly in the MERCOSUL countries: -3.73% in Argentina, -2.05% in Brazil, and -4.56% in Uruguay.

The elimination of import tariffs through the creation of MERCOEURO in this scenario results in reduced E.U. exportation and increased importation of agribusiness products and increased exportation of the MERCOSUL countries' main agribusiness products. Meats sector exports are the most sensitive to the elimination of the tariffs. The European Union's meat exports fall 11.19% while its meat imports increase 9.55% to satisfy internal demand. The MERCOSUL countries' meat exports increase. As meat is Uruguay's main agribusiness export, the country's export earnings significantly increases. Tariff elimination in E.U. also results in an increase in the export of Brazilian soybean, sugar, and OAgribusiness and Argentine corn and OAgribusiness. Argentina does suffer a decline in the exports of wheat (-3.18%) and milk (-9.55), two important products in the composition of Argentina's agricultural trade balance.

As expected, the export of E.U. manufactures increases in this scenario, 1.02%, while corresponding MERCOSUL exportation falls in all countries other than Brazil. Although Brazil experiences a 3.29% increase in the export of manufactures, the country also experiences a significant increase in the importation of manufactures,



14.25%. The importation of manufactures also increases in the other MERCOSUL countries.

These results reflect the MERCOSUL countries' competitiveness in the production of agricultural commodities and the MERCOSUL countries' competitive disadvantage to the E.U. countries in the production of manufactured goods.

#### 3.1.4. *Scenario MERCOEURO 2*

This scenario simulates the elimination of import tariffs and subsidies to agricultural production and exports by the MERCOEURO member countries.

The impacts of this simulation include a very strong reduction in the production and export of E.U. agribusiness products and the elevation of production and export of agribusiness products by the studied MERCOSUL members other than Uruguay. The production and export of wheat, corn, soybean, and meat are most affected. As in Scenario MERCOEURO 1, Uruguayan production and export of meat and wheat grows significantly while the country's production and export of all other agribusiness sector products decreases.

The elimination of the subsidies to production and exports by the European Union has a significant effect on NAFTA, though it is not included in the MERCOEURO free trade area. NAFTA's production and export of wheat, corn, and soybean is significantly elevated in this scenario due to the elimination of trade distortions by the European Union and their maintenance by NAFTA.

Production and exportation of manufactured products grows in the European Union while falling in the studied MERCOSUL countries except Brazil. Brazilian manufactures exportation grows 7.37%; however, Brazilian manufactures importation grows at a greater percentile, 12.76%, which has a possible negative effect on the country's trade balance.

These results demonstrate the negative effects of the production and export subsidies granted by the European Union's Common Agricultural Policy on the agribusiness sectors in Argentina and Brazil. They again reflect the MERCOSUL countries' competitive advantage over the E.U. countries in the production of agricultural commodities and the MERCOSUL countries' competitive disadvantage to the E.U. countries in the production of manufactured goods.

### *3.2. Impacts on economic growth and welfare*

In this section, the impacts of each scenario on economic growth and welfare are compared to evaluate the potential benefits of each free trade area to the regions and countries under study.

Figure 1 presents the percentile variation in GDP of the studied countries and regions. Regarding the FTAA scenarios, small GDP growth is observed in NAFTA, larger in scenario FTAA 2 than FTAA 1, and negative growth in the MERCOSUL countries. The decrease in manufactures production explains this behavior.

The manufactures and services sectors each contribute more to GDP than does the agribusiness sector in all studied countries and regions. In the FTAA scenarios, NAFTA's earnings increase due to growth in the production and trade of manufactures. In the same scenarios, the MERCOSUL countries earnings were increased through increased agribusiness activity but were decreased more significantly by the scenarios' negative effects on their manufacturing sectors, particularly the effects generated in Scenario FTAA 2. Of the studied MERCOSUL countries, only Brazil obtains an increase in the production of manufactures in the FTAA scenarios, which is counteracted by a fall in service sector earnings.

Analysis of GDP behavior in the MERCOEURO scenarios shows growth in both the European Union and the MERCOSUL countries, with Scenario MERCOEURO 2 presenting more favorable economic growth, even within NAFTA.

The behavior of the variation of GDP indicates that the free trade area, simulated in scenarios MERCOEURO 1 and 2, generates greater economic growth in the MERCOSUL countries than would the FTAA. The Scenario MERCOEURO 2, which eliminates subsidies to agricultural production and exports, presents the best GDP results for the MERCOSUL countries. In this scenario, GDP shows growth of 1.09% in Argentina, 0.52% in Brazil, and 14.16% in Uruguay. This GDP behavior certainly offers MERCOSUL new options in the development of multilateral negotiation strategies for the formation of a free trade area with NAFTA or with the European Union or with both.

According to the variation of per capita utility, Figure 2, there is a welfare gain for Argentina and Uruguay in the MERCOEURO scenarios, more noticeably in MERCOEURO 2. In all other countries and blocks, per capita utility variations were insignificant in all scenarios. This result allows it to be inferred that the formation of

MERCOEURO with the least amount of subsidies and tariffs elevates the income level of the Argentine and Uruguayan populations, generating increased and welfare.

Equivalent variation, Figure 3, expressed in US\$ millions, is the product of initial income multiplied by the percentage change in per capita utility. As it considers the initial size of the affected economy and the change in welfare level (arrived at from the change in per capita utility), equivalent variation monetarily demonstrates the effect of changes in welfare on economies of different size.

NAFTA shows welfare gains in the FTAA scenarios, with the larger gain in scenario FTAA 2. The European Union gains welfare only in the MERCOEURO scenarios, with the larger earnings in the scenario MERCOEURO 2. The behavior of this welfare indicator is explained by the size of these economic blocks in terms of production and, mostly, from the elimination of import tariffs. The elimination of tariffs causes a fall in the domestic price level and a corresponding elevation in the level of real income and welfare. Similar welfare gains are found in Argentina and Uruguay in the scenarios MERCOEURO 1 and 2 and in Brazil in scenarios FTAA 1 and MERCOEURO 1, however, the earnings gains are less for the MERCOSUL countries than for either NAFTA or the European Union.

#### **4. Conclusions**

In all scenarios, the formation of either FTAA or MERCOEURO increases the production and exportation of the studied MERCOSUL countries' main agribusiness commodities. This demonstrates that the MERCOSUL countries' agribusiness sectors are competitive in international markets but are strongly prejudiced by NAFTA and the European Union's tariffs and subsidies, which guarantee the agribusiness competitiveness of NAFTA and of the European Union.

In all analyzed scenarios, the MERCOSUL countries are not internationally competitive in the production of manufactures. Therefore, these countries should implement macroeconomic policies that promote interest and tax rate reduction to generate industrial competitiveness.

With regard to the economic growth indicator GDP, the results showed economic growth in Argentina and Uruguay in both MERCOEURO scenarios. The greatest increase in these two countries GDP growth was observed when import tariffs and subsidies to agribusiness production and exportation are eliminated in Scenario MERCOEURO 2. In Brazil, small economic growth, 0.52%, is obtained in only this

scenario.

The welfare indicators per capita utility and equivalent variation improved in Argentina and Uruguay in both MERCOEURO scenarios and in Brazil in scenarios FTAA 1 and MERCOEURO 1. In NAFTA and in the European Union, gains in the welfare indicators were obtained when these blocks took part in the formation of a free trade area with MERCOSUL, which is for the most part explained by the improved performance of their manufacturing sectors.

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**Table 1 – Regional and Commodity Aggregation**

Regional Aggregation	Commodity Aggregation
1. NAFTA	1. Rice: Paddy rice and processed rice
2. European Union (E.U.)	2. Wheat
3. Argentina (ARG)	3. Corn: Cereal grains
4. Brazil (BRA)	4. Soybean: Oil seeds and vegetable oils
5. Uruguay (URY)	5. Sugar: Sugar cane, sugar beet, and sugar
6. Rest of America (ROA)	6. Milk: Raw milk and dairy products
7. Rest of World (ROW)	7. Meat: cattle, animal products, and meat products
	8. OAgribusiness: Coffee, COJ, wood products, fiber, wool, food, vegetables, and fruits.
	9. Manufactures: Machines, tractors, chemicals, other manufactures
	10. Services and public administration

Source: GTAP.

**Table 2 – Percent change in production and trade, scenario FTA 1**

	Percent change in production quantities				
	NAFTA	E.U.	ARG	BRA	URY
Rice	4.96	0.23	1.67	0.37	3.12
Wheat	0.59	0.08	1.13	-0.02	-0.03
Corn	-0.03	0.08	2.44	0.73	-0.55
Soybean	-0.66	-0.05	2.27	0.01	2.69
Sugar	-11.03	0.23	3.79	2.14	0.15
Meat	-0.05	0.02	0.88	0.18	0.97
Milk	0.08	-0.11	0.97	0.01	6.63
OAgribusiness	-0.65	0.02	0.94	1.28	0.59
Manufactures	0.30	-0.10	-1.02	-1.27	-2.36
Services	-0.04	0.03	0.10	0.26	0.15
	Percent change in export quantities				
	NAFTA	E.U.	ARG	BRA	URY
Rice	19.64	0.42	7.16	19.24	5.91
Wheat	1.29	0.17	1.36	0.79	-1.15
Corn	0.81	0.29	5.09	3.85	-3.75
Soybean	-0.17	-0.29	7.40	1.51	8.18
Sugar	-11.16	0.57	117.12	13.68	19.47
Meat	0.43	0.08	12.28	2.94	4.01
Milk	10.16	-0.33	31.79	42.69	23.04
OAgribusiness	-0.75	-0.18	17.20	23.12	7.10
Manufactures	2.35	-0.23	6.36	14.46	1.21
Services	-1.50	0.90	4.96	1.42	0.81
	Percent change in imports quantities				
	NAFTA	E.U.	ARG	BRA	URY
Rice	0.87	-0.03	-0.12	1.27	1.91
Wheat	-0.25	-0.01	-0.40	3.95	2.92
Corn	-0.23	-0.02	12.31	3.79	1.74
Soybean	2.06	-0.09	17.02	11.77	2.78
Sugar	54.70	-0.33	1.74	5.08	0.11
Meat	1.56	-0.05	1.71	5.25	3.52
Milk	5.82	-0.03	5.63	1.73	12.93
OAgribusiness	6.61	-0.29	5.81	6.12	2.74
Manufactures	1.27	-0.20	9.34	17.02	4.84
Services	0.87	-0.03	-0.12	1.27	1.91

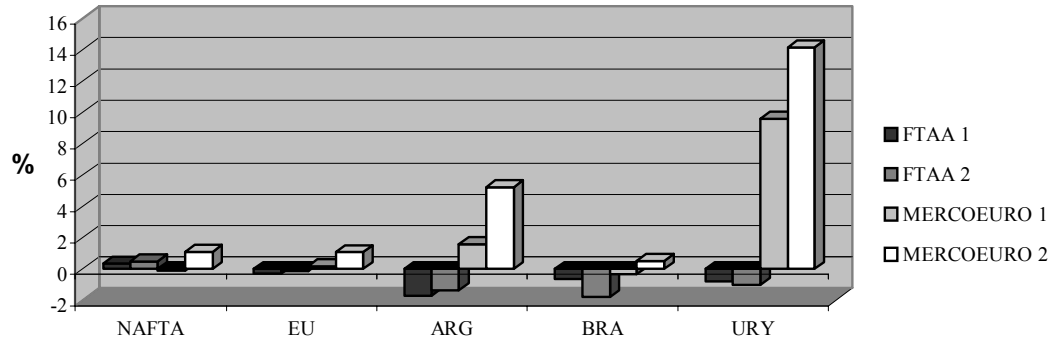
Source: Research results.

**Table 3 – Percentage change in production and trade, scenario FTAA 2**

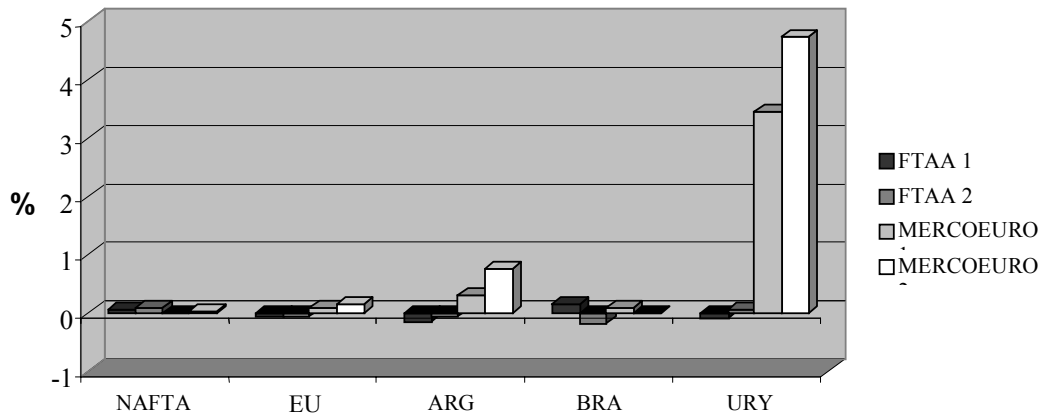
Percent change in production quantities					
	NAFTA	E.U.	ARG	BRA	URY
Rice	-11.11	3.03	2.27	1.02	2.44
Wheat	-13.78	3.34	6.02	3.76	2.06
Corn	-3.12	1.44	5.21	2.25	0.56
Soybean	-5.54	0.61	3.05	4.16	1.38
Sugar	-14.20	0.21	3.88	3.94	-0.05
Meat	-2.35	0.27	1.13	1.40	2.73
Milk	-1.69	0.23	1.19	0.44	3.86
OAgribusiness	-0.93	0.02	0.72	2.50	0.59
Manufactures	0.45	-0.22	-1.40	0.70	-3.70
Services	0.02	0.01	0.17	-0.69	0.40
Percent change in exports quantities					
	NAFTA	E.U.	ARG	BRA	URY
Rice	-22.37	5.27	9.77	44.94	4.60
Wheat	-24.32	11.62	13.01	36.13	11.75
Corn	-11.91	5.16	11.50	25.72	0.90
Soybean	-10.27	2.01	9.47	11.16	4.11
Sugar	-54.66	0.40	127.69	23.05	15.02
Meat	-11.15	1.23	16.32	16.53	9.81
Milk	-43.43	0.68	36.28	70.36	13.83
OAgribusiness	-1.06	-0.17	15.11	34.84	6.24
Manufactures	2.70	-0.46	3.54	27.50	-4.55
Services	-1.00	0.70	4.38	2.93	2.24
Percent change in imports quantities					
	NAFTA	E.U.	ARG	BRA	URY
Rice	18.65	0.04	0.66	-2.38	-2.49
Wheat	0.09	0.11	2.56	-2.18	-0.21
Corn	0.99	0.02	8.05	-1.60	-0.87
Soybean	2.42	-0.56	14.72	7.60	0.75
Sugar	55.40	-0.34	4.90	-4.36	1.55
Meat	2.07	-0.10	3.58	-0.75	3.11
Milk	-4.39	0.04	-1.77	-4.84	2.35
OAgribusiness	6.60	-0.25	7.26	1.88	2.47
Manufactures	1.17	-0.16	10.56	11.54	4.30
Services	0.76	-0.35	-2.62	-1.92	-1.21

Source: Research results.

**Figure 1 – Percentage change in Gross Domestic Product (GDP)**



**Figure 2 – Percentage change in per capita utility**



**Figure 3 – Equivalent Variation in US\$ million**

