

# The Impact of Agricultural Import Tariff on Economic Growth: Evidence From Mercosur Countries

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This research paper attempts to determine the relationship between agricultural import tariff and economic growth of Mercosur countries over the period 1996-2007 using regression analysis as well as evaluates the gains and losses from the group's trade policy over the same period. The introductory part of this paper focuses on the dynamics of changes in economic growth, trade, and import tariff of these countries over the last two decades. The results of the performed regression analysis of panel data suggest that trade liberalization has a quantitatively significant positive effect on growth. By using the coefficient estimates on tariff, the authors perform a quantitative evaluation of gains and losses from trade policy, for which tariff measures to trade (imports) are used as a proxy.

*Keywords:* Mercosur, economic growth, trade, import tariff, panel data regression

## Introduction

In response to the 1980s' crisis triggered by global recession, slumping commodity prices, soaring interest rates, and rising indebtedness, Latin America launched a course for reforming its economy aimed at enhancing macroeconomic stability and dealing with huge foreign debts, trade policy being one of the key instruments for achieving this goal. The active participants in solving Latin American countries' foreign debt problem were international financial organizations that tied them to the principles of the Washington consensus in order to spur them into major structural reforms designed to boost and facilitate the transition to an open market economy. Among these reforms, unilateral trade liberalization played a key role bringing major decrease in tariff rates, the number of dutiable goods, trade barriers, tariff protection dispersion, and export tax. At the same time, engagement in international trade spurred these countries into developing production and exporting the most competitive goods and services, which eventually caused a manifold increase in the volume of their foreign trade, significant export diversification, and greater expansion of their presence in global markets. Despite the fact that the global financial crisis of 2008-2009 interrupted these upward trends and that the national economic policy priorities were allocated to anti-crisis measures, in 2010 the region's leading economic indicators significantly improved and in 2011 exceeded the pre-crisis level.

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### Economic Growth, Trade, and Import Tariff of Mercosur<sup>1</sup> Countries

#### Economic Growth

Over the period of 1991-2012, the group's economy grew at almost the same robust pace but the beginning of the 2010s was marked with quite a substantial acceleration of economic growth: The average annual real gross domestic product (GDP) growth rate in the first decade amounted to 3.0%, in the second decade to 3.1%, in the early 2010s to 4.7% (see Table 1). Argentina's growth rates were the highest whereas Brazil and Uruguay's were close behind.

Table 1

*Real GDP Growth Rates of Mercosur Countries, 1991-2012 (Average Annual Growth Rate, Percentage)*

Country	Year											
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2012*
Argentina	10.6	5.7	-2.8	8.1	-3.4	-4.4	8.8	9.2	8.7	0.9	8.9	1.9
Brazil	1.0	4.9	4.2	3.4	0.3	1.4	1.2	3.0	5.8	-0.3	2.7	0.9
Paraguay	2.5	4.9	6.8	4.2	-1.4	-0.8	4.3	2.1	5.4	-4.0	4.3	-1.2
Uruguay	3.5	2.7	-1.4	5.0	-2.8	-3.4	2.2	6.6	6.5	2.2	6.5	3.9

Notes. \* Preliminary figures. Source: CEPALSTAT (n.d.).

An upward trend can also be found in the average annual growth rate of real GDP per capita (PC) over a given period: Thus, in the first decade it amounted to 1.2%, in the second decade to 1.7%, in the early 2010s to 3.4% (see Table 2). Argentina's growth rates were the highest whereas the others' were close behind.

Table 2

*Real GDP Per Capita Growth Rates of Mercosur Countries, 1991-2012 (Average Annual Growth Rate, Percentage)*

Country	Year											
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2012*
Argentina	9.1	4.3	-4.0	6.8	-4.5	-5.4	7.9	8.2	7.7	0.0	7.9	1.0
Brazil	-0.6	3.3	2.6	1.8	-1.2	0.0	-0.1	1.8	4.8	-1.2	1.9	0.1
Paraguay	-0.1	2.4	4.4	2.0	-3.4	-2.8	2.3	0.2	3.5	-5.6	2.6	-2.8
Uruguay	2.8	1.9	-2.1	4.3	-3.4	-3.6	2.2	6.6	6.3	1.9	6.2	3.6

Notes. \* Preliminary figures. Source: CEPALSTAT (n.d.).

Moreover, if comparing growth rates of real GDP by region and country, one may notice that those of Latin America and the Caribbean are coming quite close to those of developing countries and significantly exceed those of the world and especially those of developed countries (see Table 3). It is also worth mentioning that in 2009, just after the crisis, real GDP growth of both developed and Latin American and Caribbean countries that have a very tight historical trade and economic relationship with the former (especially with the U.S. and EU member states) was negative although that of the latter declined to a less significant extent

<sup>1</sup> On June 29th, 2012, the heads of state of Mercosur member countries met in Mendoza during their 43rd summit and the presidents of Argentina, Brazil, and Uruguay temporally suspended Paraguay's membership in the group until it solves its current institutional problems, which might have happened immediately after the next presidential election in 2013. At the same time, it was decided that Venezuela would join the group as a full member at the next meeting in Rio de Janeiro on July 31st, which was only possible after the suspension of Paraguay, whose parliament had been blocking Venezuela's joining the group. It should be noted that this research was conducted prior to this event, which is why, whenever the term "Mercosur countries" is used, Argentina, Brazil, Paraguay, and Uruguay are meant.

(Moseykin, 2010). In 2010, the values of the real GDP growth of all the countries of the world, regardless of their income level, became positive again. Kholodkov (RAS Latin American Institute Roundtable, 2011) writes on this matter:

This time, Latin America has demonstrated a higher level of resilience in facing negative externalities. The recession did not grow into a systematic crisis with its extremely high costs. The economic downturn was not accompanied by mass devaluation of national currencies, bankruptcy of financial institutions and real sector enterprises, defaults on government and corporate bonds, inflation jump and escape of capital. The countries of this region did not become a generator or an additional source of tension in the world. Moreover, LCA's (Latin America and the Caribbean) relatively fast achieving positive growth rates proved to be one of the factors of the global recovery. (p. 29)

Table 3

*Real GDP Growth Rates, by Region and Country, 2003-2012 (Average Annual Growth Rate, Percentage)*

Region/country	Year									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*
World	2.7	4.1	3.5	3.9	3.8	1.6	-2.3	4.0	2.7	2.2
Euro zone	0.8	2.1	1.7	3.0	2.7	0.6	-4.3	2.1	1.5	-0.5
United States	2.5	3.6	3.1	2.7	2.1	0.4	-3.5	2.4	1.8	2.1
Latin America and the Caribbean	2.2	6.1	5.0	5.8	5.8	4.2	-1.8	6.0	4.3	3.1
Developing countries	5.2	7.4	6.6	7.3	7.5	5.4	2.5	7.7	5.7	4.7
China	10.0	10.1	10.4	11.6	13.0	9.0	8.4	10.3	9.2	7.7
Japan	1.4	2.7	1.9	2.0	2.3	-0.7	-6.3	4.5	-0.7	1.5

Notes. \* Preliminary figures. Sources: ECLAC, 2009, p. 17; ECLAC, 2010, p. 15, Annex Table A1; ECLAC, 2011, p. 17; ECLAC, 2012, p. 13.

The same table shows that, according to the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), in 2011, Latin America and the Caribbean's real GDP growth amounted to 4.3% (whereas in 2010 it amounted to 6.0%) and in 2012 it was expected to be only 3.1%, which seems to be signaling that the region's economy has been slowing down. Moreover, experts of the Inter-American Development Bank (IDB) proposed two scenarios of regional economic development. Under the first scenario, in 2012 regional GDP would shrink 0.6% whereas under the second one, in 2012 economic growth would slow down causing a one-percent shrink in 2013's GDP. As a result, production losses under the first scenario might reach 8% of GDP and 12% of GDP under the second one. Commenting on their estimates, the experts (Klochovski, 2012) pointed out:

If Europe's problems become more complicated and China's growth rates decline more sharply than expected, the U.S. may find itself drawn into a new recession, which will surely affect the entire region... Along with the outcomes of China's slowdown, they will cause a recession in Latin America and the Caribbean although on a moderate scale. (pp. 5-6)

The region, which went quite well through the first wave of the crisis, is likely to face a second wave of it in the very near future. Thus, Kholodkov (RAS Latin American Institute Roundtable, 2011) points out:

It is believed that the imperatives of LCA's (Latin America and Caribbean) post-crisis development will cause a new round of reforms aimed not only at stabilization but also at the acceleration of socio-economic progress.

Latin American governments are already taking certain steps in many directions, which include measures to improve their monetary and fiscal policy, to enhance domestic demand and to strengthen their trade and financial links with other regions... It is important to emphasize that the revision and adjustment of certain conceptual directions of their economic strategy are combined with the development of a more independent policy on the international stage... However, under the

present circumstances, it is far too early to speak about cloudless prospects for LCA's development. Despite the upward trend, one can observe the region's consistently slower growth rates as compared to those of other developing regions.

Moreover, a relatively steady recovery from the recession does not signal the acquired immunity to external shocks in the future, especially given the unstable economic situation in the world. (p. 30)

## Trade

Over the last two decades, the dynamic of foreign trade of nine South American countries has been characterized by a stable upward trend: For example, Table 4 shows that during 1991-2011, Brazil's trade increased nine-fold, Argentina's more than seven-fold, that of the other two countries four to six times.

Table 4

*Exports and Imports of Goods and Services of Mercosur Countries, 1991-2011 (Million US\$)*

Country	Year										
	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011
<b>Exports</b>											
Argentina	14,561	16,358	24,897	30,834	27,751	30,977	32,362	45,923	64,218	65,581	97,342
Brazil	35,345	46,036	55,801	59,422	55,230	67,434	82,798	133,460	182,671	177,878	294,453
Paraguay	3,551	4,344	5,577	4,811	3,747	3,391	3,580	5,007	7,791	8,163	12,705
Uruguay	2,319	2,869	3,666	4,185	3,621	3,512	3,304	5,279	6,810	8,544	12,645
<b>Imports</b>											
Argentina	11,531	22,051	25,998	37,406	32,702	27,434	18,405	35,152	53,033	49,152	87,119
Brazil	32,236	39,868	67,475	78,586	63,475	74,716	66,712	101,628	161,894	180,475	312,617
Paraguay	2,675	3,892	5,101	4,730	3,091	2,710	2,640	4,024	6,496	7,161	12,636
Uruguay	2,002	2,934	3,686	4,854	4,386	4,076	2,930	4,944	7,051	8,286	12,872

Note. Source: World Bank (n.d.).

The exceptions were the post-crisis 1999 when exports and imports of all the four countries dropped 15% on average from the previous year and the post-crisis 2009 when there was a decrease in one country's exports (Brazil's) and in one country's imports (Argentina's). However, 2010 brought a trade rebound to the region and in 2011 regional trade surpassed the pre-crisis level. Thus, Razumovsky (2011) notes:

First of all, speaking of the region's foreign trade, it is worth mentioning its rapid recovery (well above expectations) since 2008-2009 on: in 2010 its trade volume increased by 21.4%. It is definitely a more powerful and dynamic rise than the one observed in industrialized countries but as compared to the world average of 25% or to that of the world's most dynamic emerging economies such as India, China, etc., Latin American countries' success is barely impressive.

As an impetus to the region's economic recovery served mostly exports of raw materials to China, which in the middle of 2010 had already exceeded the pre-crisis level. (p. 11)

Also, ECLAC experts Osvaldo Rosales and Mikio Kuwayama (Klochovski, 2012) write:

Overcoming the financial crisis in Latin America, particularly in South America, was largely dependent on economic recovery in Asia, particularly in China. Chinese demand has saved Latin American exports. Raw material suppliers (particularly Latin American ones) were less affected by the crisis due to high rates of China's economic growth, which helped sustain high demand for these products. (p. 10)

Indeed, all the four Mercosur member countries have been traditional suppliers of agricultural products to the world market for decades. Argentina is the world's largest supplier of soy and its derivative products, maize,

wheat, linseed oil and its fractions, sunflower oil. Brazil is the world's largest supplier of soy and its derivatives, coffee, cocoa, sugar cane, meat, and oil-seeds. Paraguay is a major supplier of soy and its derivatives, cotton, beef, oil-seeds, sugar cane, wheat, maize, feeding stuff for animals, leather, and wood. Uruguay is a major supplier of beef, soy and its derivatives, rice, wheat, dairy products, cellulose, wood, and wool. The first two also export fuels and mining products, which are mostly crude oil and petroleum products, natural gas, iron ore. On the whole, agricultural products account for about 80% of Paraguay's total exports, more than 50% of Uruguay's, about 30% of Argentina's, about 20% of Brazil's (Levchenko, 2012a, pp. 26-28). Over the last two decades, the share of agriculture in the four countries' total exports has been persistently declining. Nonetheless, there have been no clear signals for a major export diversification going on since this decline accounts for no more than few percentage points except for Argentina whose share of agriculture in total exports experienced quite a substantial reduction from 40% at the beginning of the 1990s down to 30% at the end of the 2000s whereas there was a significant increase in the share of fuels and mining products from 5% up to 11% and a slight increase in the share of manufactured goods from 3% up to 8% (source: authors' estimates, based on ECLAC Statistical Yearbook'10, n.d.). As for Brazil, the region's largest economy, there was a rise in exports of fuels and mining products up to 19% of total exports at the end of the 2000s and, conversely, a reduction in exports of manufactured goods (the country exports primarily transport equipment, automobiles, and shoes) from 12% in the early 1990s down to 5% at the end of the 2000s (source: authors' estimates, based on ECLAC Statistical Yearbook'10, n.d.). ECLAC experts (Klochkovski, 2012) point out quite the same:

For quite a long time, Latin American countries, while seeking to improve the efficiency and sustainability of their exports, have been increasing their exports of finished and semi-finished products. From the early 1980s to the late 1990s, the share of raw materials in Latin America's total exports declined from 52% to 27% whereas the share of finished products increased correspondingly. However, since the beginning of the first decade of the 21 century on, there has been a backward tendency and in 2008-2009 the share of raw materials and food commodities (in the region's total exports) reached almost 40%. Eight leading South American countries saw this share exceed 50%. (p. 7)

As for Latin American and Caribbean imports, the last two decades have not brought any major changes. Mercosur imports consist primarily of manufactured goods including machinery which accounts for about 30% of the trade bloc's total imports, vehicles which account for 12% of total imports, chemical products which account for 15% of total imports as well as of minerals which account for 15% of total imports and oil except for Argentina which relies mostly on its own oil reserves (source: authors' estimates, based on ECLAC Statistical Yearbook'10, n.d.).

### **Import Tariff**

As it can be seen from Figure 1, over a 14-year period, Mercosur import tariff had a relatively steady downward trend: Most favored nation (MFN) applied simple average import tariff for all goods and products decreased from 13.0% in 1996 to 11.0% in 2007. In response to the international financial crises of 1997-1998 and 2008-2009, there was a slight increase in tariff. Thus, in 2009 the tariff rate grew up to 11.8%. More precisely, experts of the World Trade Organization (WTO) (2012) point out:

During the recent financial crisis, a number of "emergency" measures were taken to stem the spread of systemic damage. At the same time, it was feared that the crisis could increase the temptation to resort to beggar-thy-neighbour policies. This has heightened the need for the monitoring of measures taken in response to the crisis in order to guard against the spectre of protectionism. (p. 7)

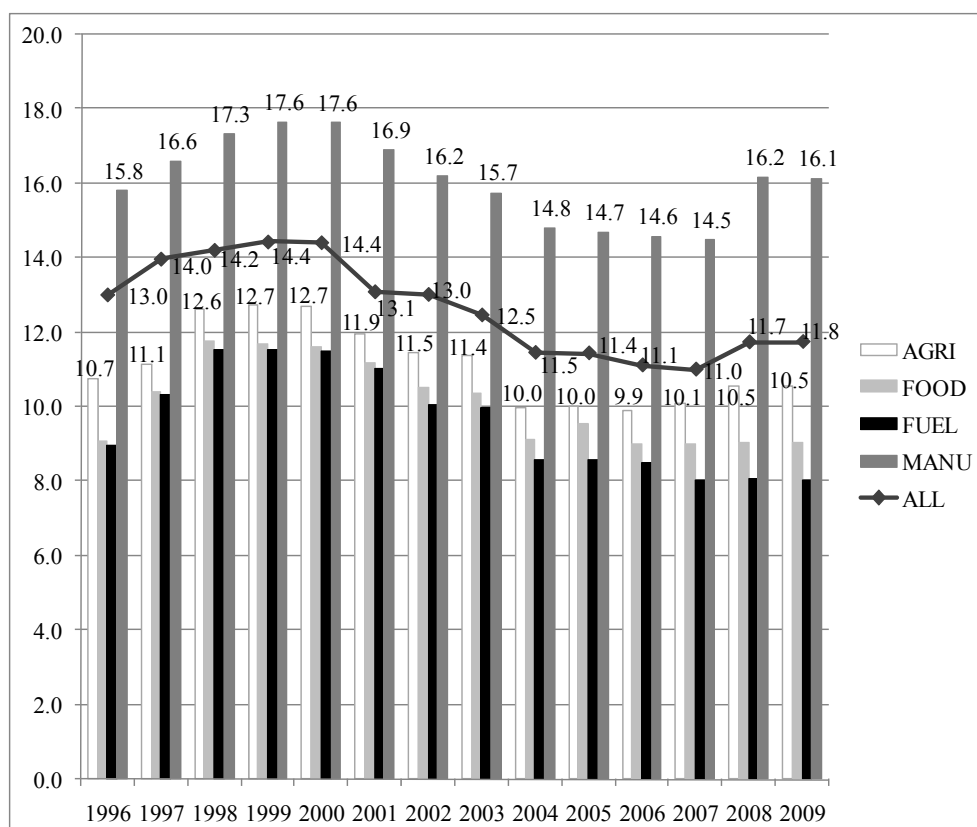


Figure 1. MFN applied duties within Mercosur, by major product group, 1996-2009 (Simple average of ad-valorem and calculable ad-valorem equivalent of MFN applied HS 6-digit duties, percentage). Notes: Abbreviations: AGRI: agricultural products; FOOD: food products; FUEL: fuels and mining products; MANU: manufactured goods; and ALL: all goods and products. Source: Authors' estimates, based on WTO, 2011.

If having a quick look at the world's average figures and those of highly developed economies (source: authors' estimates, based on WTO, 2011), one can easily notice that simple average import tariff applied across the world and particularly that of developed countries had the same tendency as the one observed on the South American continent, namely, during 1996-2009, there was persistent fall in tariffs, except for 1997-1998 and 2008-2009 when a slight increase took place. In 1996, the average global tariff rate was at 9.7%, in 2007 at 7.0%, in 2008 at 7.1%, in 2009 at 6.9%. U.S. import duty rates followed the same scenario as the average global ones did, namely, in 1996 it was at 4.1%, in 2007 at 2.9%, in 2008 at 3.2%, and in 2009 at 3.0%. Japan tariff rates have been persistently decreasing over the entire 14-year period except for 2001, 2006, and 2007, thus, in 1996, it stood at 4.5%, in 2009 at 3.3%.

The tariff rate of the EU member countries, whose signing the Maastricht Treaty in 1992 officially turned them into a common market, also experienced a steady decrease over the entire 14 years' period except for 1998-1999, 2001-2004, and 2006, thus, in 1996, it stood at 3.9% whereas in 2009 at 2.1% (WTO, 2011).

Thus, the overall conclusion is that South America followed exactly the same pattern as the entire world and particularly developed countries did. However, South American tariff rate still exceeds the world's average by 1%-3% and is three to four times lower than that of developed countries.

As far as tariff protection by major product group is concerned, Figure 1 also shows that Mercosur industrial products were the most protected product group covered by a 15.8 percent tariff in 1996 and by a

14.5 percent tariff in 2007 being followed by agricultural products with a 13.0 percent tariff in 1996 and an 11.0 percent tariff in 2007. Fuels and foods had the lowest level of protection.

It should also be noted that the global tariff on industrial products is slightly lower than that for all goods and products whereas that on raw materials and primary commodities is 2.5%-3% higher than that for all goods and products (source: authors' estimates, based on World Bank, n.d.). On the contrary, U.S. tariff on industrial goods exceeds that for all goods and products whereas that on raw materials is considerably lower than that for all goods and products (World Bank, n.d.), which is likely to be explained by the very nature of the country's production, imports, and exports: It is well known that the country is the world's leading manufacturer and supplier of high value-added industrial goods and products while importing raw materials serving to manufacture products to be exported.

Unlike U.S.'s, EU's tariff on industrial products is 1% lower than that for all goods and services whereas that on raw materials more than twice exceeds that for all goods and products (World Bank, n.d.), which, again, can be explained by the nature of the group's production, imports, and exports: For instance, it is well known that European national agricultural producer's protection is one of the highest across the globe. The same concerns Japan where the import tariff on raw materials exceeds the European level: In 1996, EU tariff was at 9.7% versus Japan's 13.5%, in 2009 at 5.1% versus Japan's 8.3% (World Bank, n.d.).

On the whole, what is being observed in Mercosur can also be seen around the world. However, Mercosur's protection of its domestic markets from foreign importers is still significantly higher than that of developed countries, which may be partially explained by the functions the tariff performs in developing countries: For example, the fiscal function of the tariff is known to often prevail here since import and (which happens quite rarely) export duty is a substantial part of government revenues. Also, a higher import tariff on industrial goods is also aimed at stimulating the economy, namely, at protecting infant industries and at supporting the domestic producer. A higher import duty on agricultural products can also be imposed for national security reasons since agriculture has played a predominant role throughout the history of developing countries, creating jobs and goods to be exported.

### **Literature Review**

There has been a lot of academic and empirical research literature addressing problems of the relationship between developing countries' trade and trade policy, on the one hand, and their economic growth and development, on the other hand. One of the most cited research studies in this respect, conducted by Dollar in 1992, shows that in 1976-1985 the most open quintile of the investigated developing countries had the highest per capita growth rate of 2.9% whereas the other three more closed ones were at 0.9, -0.2, and -1.3% correspondingly. Thus, the author concludes that liberalizing trade and devaluating real exchange rate as well as keeping it sustainable can have a significant impact on poor countries' economic growth.

Dollar and Kraay (2001) identify a group of developing countries more involved in globalization than the others. As China, India and a number of other big countries are included in this group, it can be assumed that they represent more than half of the developing world's population. These countries have been integrating in the global economy at a particularly fast pace since the 1980s and have seen a significant increase in their foreign trade and a significant decrease in their tariff throughout the 1980s-1990s. The regression analysis revealed a considerable positive effect of trade on growth. The authors also analyzed the impact of trade expansion on the poor and came to a conclusion that an increase in trade volume leads to growth acceleration

and a corresponding increase in the poor's income.

Nevertheless, Rodrik (1999) writes:

Firstly, openness itself is not a reliable mechanism able to generate sustainable economic growth. Secondly, openness is likely to exacerbate pressure increasing income and wealth inequality among countries. Thirdly, openness makes countries vulnerable to external shocks which may cause domestic conflicts and political upheavals. (pp. 13-14)

The author continues:

The policy of import substitution that was pursued in many developing countries in the 1980s was quite successful and its costs were exaggerated... Import substitution worked quite well for about two decades. It generated unprecedented economic growth in many countries of Latin America, the Middle East, and North Africa and even in some countries of Sub-Saharan Africa... Arguments for the orthodoxy of free trade are nothing but exaggeration. Investment and macroeconomic policy remain crucial. There is no magic formula of overcoming the obstacles on the way to economic growth. If there is one, it is not openness. (p. 141)

Moreover, in his paper (Rodríguez & Rodrik, 1999) written together with Rodríguez in the same year, Rodrik shows that there are consistent methodological problems with all those empirical research studies that evaluate the impact of trade liberalization on economic growth acceleration and that their findings may be interpreted in a way different from that of the very researchers.

Srinivasan and Bhagwati (1999) prove that, as the 1970s-1980s' leading studies conducted under the auspices of the Organisation for Economic Co-operation and Development (OECD), the National Bureau of Economic Research (NBER) and the World Bank showed that, the costs of import substitution as a strategy of industrialization, which was considered by many economists specializing in economic development to be a synonym of economic development, were significant throughout the 1950s-1960s. This research encouraged many developing countries to abandon the import substitution strategy. Just like Rodríguez and Rodrik (1999) and Srinivasan and Bhagwati (1999) also reject cross-country regression methodology due to its weak theoretical foundation, poor data quality, and inappropriate econometric models. The authors argue that the most reliable methodology would be case study analysis based on the data retrieved from the OECD, NBER, and World Bank. At the same time, they conclude that there is a positive relationship between openness and economic growth.

Moreover, in her address (Krueger, 1997) to the American Economic Association (AEA), Krueger proclaimed (1997) that:

It is now widely accepted that growth prospects for developing countries are greatly enhanced through an outer-oriented trade regime and fairly uniform incentives (primarily through the exchange rate) for production across exporting and import-competing goods... It is generally believed that import substitution at a minimum outlived its usefulness and liberalization of trade and payments is crucial for both industrialization and economic development. While other policy changes also are necessary, changing trade policy is among the essential ingredients if there is to be hope for improved economic performance. (p. 1)

Edwards (1991) performed a cross-country regression analysis and concluded that countries that liberalize their foreign trade and become more open tend to grow at higher pace. In his later work (Edwards, 1997), he revised the subject using a new database and improved econometrical methods and made the same conclusion: A more open economy tends to grow at higher pace.

Frankel and Romer (1999) also performed a regression analysis and concluded that trade has a significant positive impact on income although it is statistically limited.

Ben-David (1993) concluded that during the post-war decades, there had been a strong positive relationship between trade liberalization and income equalization across the European Economic Community (EEC).

Sachs, Warner, Åslund, and Fischer (1995) made an effort to estimate the influence of the post-war trade liberalization on developing countries' economic growth:

The years between 1970 and 1995, and especially the last decade, have witnessed the most remarkable institutional harmonization and economic integration among nations in world history. While economic integration was increasing throughout the 1970s and 1980s, the extent of integration has come sharply into focus only since the collapse of communism in 1989. In 1995 one dominant global economic system is emerging. The common set of institutions is exemplified by the new World Trade Organization (WTO), which was established by agreement of more than 120 economies, with almost all the rest eager to join as rapidly as possible... Similarly, the International Monetary Fund (IMF) now boasts nearly universal membership, with member countries pledged to basic principles of currency convertibility. (p. 1)

The authors continue:

Most programs of economic reform now underway in the developing world and in the post-communist world have as their strategic aim the integration of the national economy with the world economy. Integration means not only increased market-based trade and financial flows, but also institutional harmonization with regard to trade policy, legal codes, tax systems, ownership patterns, and other regulatory arrangements. (pp. 1-2)

Finally, they conclude that trade liberalization did have a positive impact on economic growth and helped prevent many economic crises.

Tybout, de Melo, and Corbo (1990) analyzed that Chilean economic indicators retrieved from 1967 and 1979's censuses. Like many other developing countries, Chile pursued import substitution policy during the 1950s-1960s. As a result, by 1967, there were considerable quantitative restrictions, the inter-industry tariff rate dispersion was large and the average protection of industrial goods had reached 100%. In the 1970s, the situation had changed dramatically: By 1974, all the quantitative restrictions had been removed and between 1975 and 1979 the average effective level of protection dropped to 15% whereas all the inter-industry tariff differences were completely removed. The authors conclude that in those industries where import duties had been lowered, the smallest enterprises' output increased but at the same time, as expected, the economies of scale dropped dramatically due to exposure to strong competition from global competitors. Besides, in those industries where tariff protection had dropped considerably, the production rate skyrocketed.

Ffrench-Davis (2002) concluded that Chilean export expansion over the last 25 years has been accompanied by moderate economic growth: Between 1974 and 2001, the annual volume of export grew by 10% whereas GDP expanded at a 4.3% annual pace only. Moreover, the export growth was accompanied by major fluctuations in GDP growth rates ranging from an 8-10 percent rise to a 14-15 percent decline.

Another similar work (Agosin, 1999) called *Trade and growth in Chile* used econometric analysis and concluded that what Chile had experienced over the last two decades was "export-initiated growth" rather than "growth-initiated export".

Moreno-Brid and Pérez (2003) analyzed Central American export and growth during 1950-1999 and concluded that external sector is a major factor determining the region's long-term economic growth and that the trade liberalization started in the mid-1980s had both negative and positive influence on growth.

Sánchez (2007) analyzed Costa Rica's losses and gains from its participation in the free trade agreement

among the Dominican Republic, Central America and the United States (CAFTA-DR) and concluded that trade liberalization caused about a 2-percent GDP growth annually or 0.4% of GDP annually, especially during the first five years of the participation in the agreement when agricultural production was booming at a particularly fast pace and the sector was not exposed to international competition yet.

Mulder (2009) is rather skeptical about the relationship between export and growth: The expansion of Latin American and Caribbean exports over the last two decades has enabled the region to strengthen its position in the world mainly due to the most recent years' increase in exports from Mexico, Brazil and some South American countries bordering the Pacific. Nevertheless, the author has not defined an obvious connection between export growth and economic growth as compared to the experience of East Asia where export expansion played a key role in growth acceleration.

Reina and Zuluaga (2008) made a comparative analysis of methodologies of the evaluation of the impact of trade policy on various income groups and concluded that trade liberalization caused growth acceleration and poverty reduction.

In summary, a greater openness and trade liberalization which often take shape of import tariff reduction are likely to have positive effects on a country's growth and development.

### **Regression Analysis of Mercosur Import Tariff and Growth**

The below empirical research attempts to estimate the impact of agricultural import tariff on the economic growth of four Mercosur countries between 1996 and 2007. The data on import tariff were extracted from the WTO Tariff Analysis Online (TAO), May 2011. It should be noted that when the statistical data on tariff which is a variable of interest in all the econometric models used in this study, which were collected, 2009 was the last year for which the data were available and that the years 2008-2009 were deliberately omitted from the analysis due to the possible distortions the crisis could bring to the traditional macroeconomic relationships taking place in an economy, which is why the chronological period of this study ends in 2007.

As seen above, Mercosur, unlike, for example, the second largest economic trading bloc based in South America, namely, the Andean Community, has been pursuing an active import tariff reduction policy for decades, which is why all the four countries from which the panel data evidence is retrieved can be considered as almost perfect advocates of unrestricted international trade, namely, free traders (Levchenko, 2012b, p. 148).

It should also be noted that this research gives special attention to agricultural products due to an important role they have played in all the four countries' exports, especially in those of Paraguay, Uruguay, and Argentina where they account for more than 80% of top 10 exports, which makes up more than half of total exports. Moreover, this product group has traditionally been subject to higher import duties especially in intra-regional trade that accounts for more than half of total trade volume in many agricultural products especially between Argentina and Brazil. Also, this product group has traditionally been a priority in WTO negotiations and all the four have been WTO members since January 1st, 1995. Thus, among the major achievements of the Uruguay round (1986-1994) was the development of the Agreement on Agriculture (AoA) which launched subsidy restrictions and market opening. Moreover, the objectives of the current Doha round, which started in 2001, include the complete abolition of this kind of subsidies by 2013 and the application of a new principle of agricultural tariff reduction, which is a binding formula that implies a larger reduction for higher tariffs, and vice versa. It can be noted that the reason why the new formula is being introduced is that the old principle of average tariff reduction made it possible for countries to impose unreasonably high duties on

sensitive goods.

The below scatter plots (see Figure 2) with trend lines for the four Mercosur countries over the period 1996-2009 enable us to make a preliminary conclusion that the relationship between agricultural import tariff and economic growth appears to be positive and quite strong.

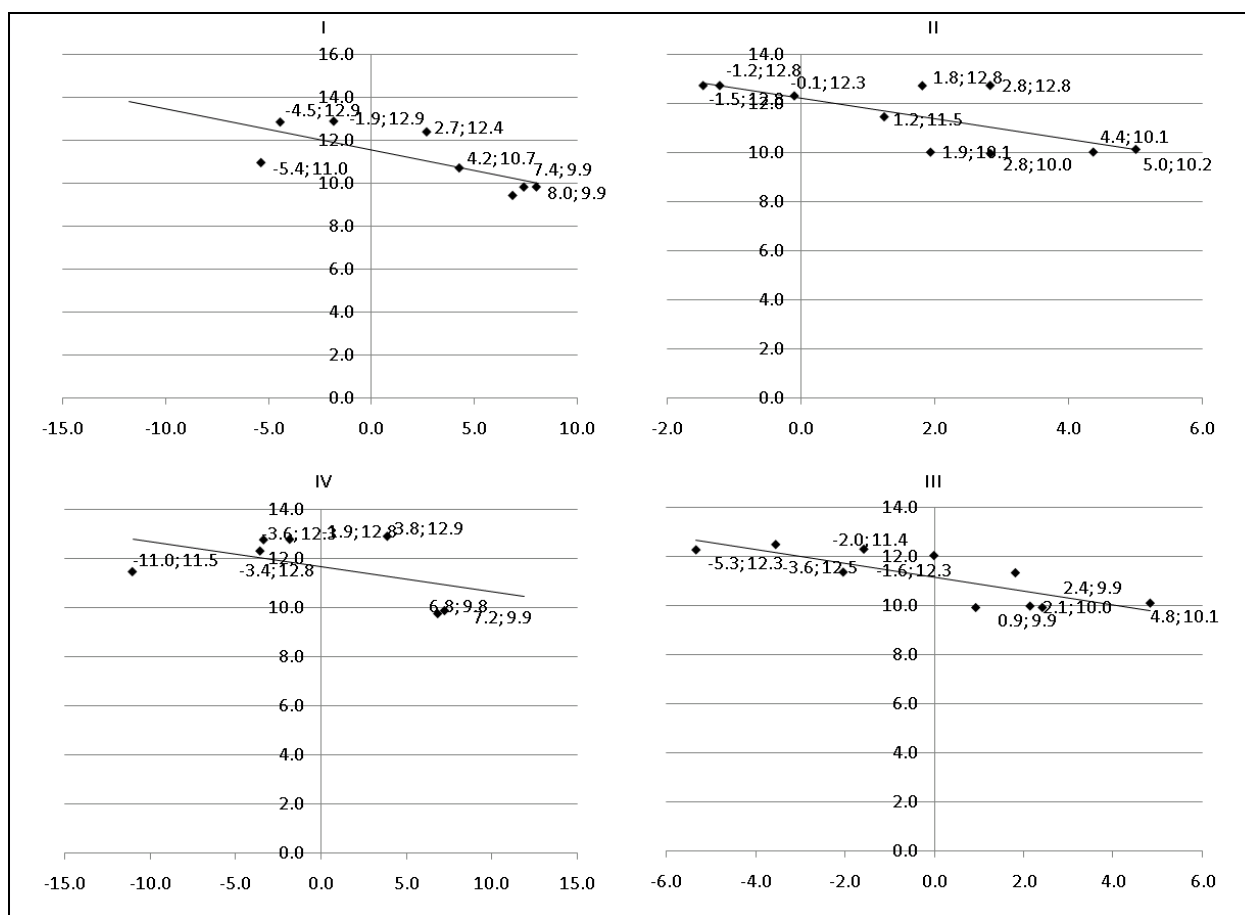


Figure 2. Scatter plots and trend lines of growth and agricultural import tariff of Argentina (I), Brazil (II), Paraguay (III), and Uruguay (IV), 1996-2007. Notes: Economic growth, for which real GDP PC growth rates are used as a proxy, is put on the x-axis; import tariff rate is put on the y-axis. Source: Authors' estimates, based on ECLAC Statistical Yearbook'10, and WTO, 2011.

To analyze the panel data on Mercosur over 1996-2007, a regression analysis with fixed and random effects at a 95% confidence level was used. Furthermore, the Hausman test was used to test the hypothesis that the coefficients estimated by the efficient random effects estimator are the same as the ones estimated by the consistent fixed effects estimator. Stata/SE (Special Edition) 10.1 for Windows was used.

Empirical evidence and statistical data were retrieved mostly from UN and its specialized agencies and divisions' databases such as WTO TAO, ECLAC Statistical Yearbook, WB WDI Database, FAOSTAT, IDA RMS Database, UNSD National Accounts, PWT 7.0, WRI Earth Trends, UNICEF State of the World's Children, UNSD MDG Database, UNSD Millennium Indicators Database, WB MDG Database, WB GDF Database, OECD Development Assistance Database, OECD Stat Extracts, IMF WEO Database, UN Demographic Yearbook, UNESCO Institute for Statistics Data Centre, WHO Data, UNDP World Population Prospects, and UNCTADSTAT.

The performed regression analysis showed that in all the cases random effects were safe enough to use (see Figure 3). The exception was the case of six independent variables.

For example, on the left side of Figure 3 is presented the following growth model specification:

$$\begin{aligned} \text{growth}_{it} = & \beta_0 + \beta_1 \text{dutagri}_{it} + \beta_2 \ln \text{consum}_{it} + \beta_3 \ln \text{gdpdef}_{it} + \beta_4 \ln \text{gdpinit}_{it} + \beta_5 \ln \text{trade}_{it} \\ & + \beta_6 \ln \text{agricrop}_{it} + \beta_7 \ln \text{agrilive}_{it} + \beta_8 \ln \text{invest}_{it} + \beta_9 \ln \text{totpop}_{it} + \beta_{10} \ln \text{urban}_{it} \\ & + \beta_{11} \text{civlib}_{it} + \beta_{12} \text{prights}_{it} + \beta_{13} \ln \text{gdpinit}_{it} + \varepsilon_{it} \end{aligned} \quad (1)$$

where:

growth: average annual growth rates of real GDP PC;

dutagri: simple average of ad-valorem and calculable ad-valorem equivalent of MFN applied Harmonized System (HS) 6-digit duties;

consum: government final consumption expenditure;

gdpdef: inflation;

gdpinit: initial real GDP PC (lagged one period);

trade: trade in goods and services;

agricrop: agricultural production;

agrilive: livestock production;

invest: investment;

totpop: total population;

urban: urban population;

civlib: extent of civil liberties;

prights: extent of political liberties.

Using the data set that has 12 independent variables and one dependent variable, the estimated equation, with standard errors in parentheses, is:

$$\begin{aligned} \text{growth}_{it} = & -119.2075(102.6067) - 1.069769(0.4647962) \text{dutagri}_{it} - 18.63393(7.888081) \ln \text{consum}_{it} \\ & + 16.2562(10.26806) \ln \text{gdpdef}_{it} - 15.09285(4.346769) \ln \text{gdpinit}_{it} + 0.4030677(6.42064) \ln \\ & \text{trade}_{it} - 3.337898(5.172681) \ln \text{agricrop}_{it} + 0.962681(6.139282) \ln \text{agrilive}_{it} \\ & + 21.11239(3.44024) \ln \text{invest}_{it} + 2.192419(1.830987) \ln \text{totpop}_{it} + 48.14489(21.24016) \\ & \ln \text{urban}_{it} - 0.4206554(.9629489) \text{civlib}_{it} - 1.391515(0.9970481) \text{prights}_{it} + \varepsilon_{it} \end{aligned} \quad (2)$$

(It should also be noted that the second growth model specification also includes the following variables:

totagri: terms of trade of agriculture;

money: initial M2 (lagged one period)).

As it can be seen from Figure 3, all the three models have proved to be statistically significant. Coefficient estimates on import tariff, which appear to be statistically significant in all the three models, lie within the interval [1.25; -1.04], which enables us to conclude that an increase in import duties indeed has a negative effect on economic growth and moreover, this effect is quite significant since a one percentage point increase in import duty results in a 1.04-1.25 percentage point decline in real GDP per capita. In other words, if the tariff changes barely for quite a long period of time, this effect is less significant; if the tariff grows faster, economic growth slows down more robustly as well.

As for the relationship between the dependent variable, which is growth, and the independent variables of control, the results obtained from the regression analysis make it possible to draw the following conclusion: There is an anticipated positive relationship between growth, for which real GDP PC growth rates are used as a

proxy, and such variables as trade, terms of trade, agricultural and livestock production, investment, population and urbanization. Also, there is an expected negative relationship between growth and government expenditure just as between growth and political rights and civil liberties (it should be remembered that the used indices take a value between 1 (a more free country) and 7 (a less free country), i.e., the lower the index, the more free the country, in other words, if the index grows up, economic growth slows down).

Variable	Coefficient estimate	Variable	Coefficient estimate	Variable	Coefficient estimate
<i>dutagri</i>	-1.07	<i>dutagri</i>	-1.04	<i>dutagri</i>	-1.25
$P> z  = 0.021$		$P> z  = 0.028$		$P> t  = 0.019$	
<i>consumlog</i>	-18.63	<i>consumlog</i>	-0.55	<i>consumlog</i>	-17.32
<i>gdpdeflog</i>	16.26	<i>gdpdeflog</i>	27.20	<i>gdpdeflog</i>	12.89
<i>gdpinitlog</i>	-15.09	<i>tradelog</i>	-2.31	<i>gdpinitlog</i>	-35.04
<i>tradelog</i>	0.40	<i>totagrilog</i>	2.84	<i>tradelog</i>	15.17
<i>agricroplog</i>	-3.34	<i>agricroplog</i>	6.61	<i>investlog</i>	14.32
<i>agrilivelog</i>	0.96	<i>agrilivelog</i>	5.86	$Prob>F = 0.0000$	
<i>investlog</i>	21.11	<i>investlog</i>	15.38		
<i>totpoplog</i>	2.19	<i>moneylog</i>	-4.06		
<i>urbanlog</i>	48.14	$Prob>chi2 = 0.0000$			
<i>civlib</i>	-0.42				
<i>prights</i>	-1.39				
$Prob>chi2 = 0.0000$					

Figure 3. Results of trade-growth regression analyses on Mercosur, over 1996-2007. Notes: Only the fixed/random effect models which had been determined by the Hausman test as most appropriate were used. *F*-statistics less than 0.05 ( $\alpha$  is equal to 0.05 or 5%) are framed; coefficient estimates on agricultural trade (*dutagri*) are also framed if *p*-values are less than 0.05.

Nevertheless, such variables as initial real GDP PC and initial financial depth demonstrated a negative effect on growth, which rather contradicts the expectations of economic theory. Moreover, it should be noted that the consequences of the financial crisis of 2008-2009 do not distort the statistics since the chronological period of the research ends just before the crisis. Another quite unexpected result obtained is that inflation, for which GDP deflator is used as a proxy, has a positive effect on growth. On the one hand, it is generally believed that a slight price increase, by which an inflation rate less than 2% annually is meant, improves the investment climate and supports the aggregate demand. On the other hand, all the four countries experienced much higher inflation rates over a given period, e.g., Uruguay's inflation was at 30%-40% at the beginning of the 1990s and at 5%-10% by the end of the first decade of the new century, which is in both cases significantly higher than the recommended inflation rate. The same concerns the other eight countries, e.g., Paraguay's inflation was at 380% at the beginning of the period and at 10% at the end of it, Brazil's at 225% and at 5%-7% respectively, Argentina's at 133% and 10%-25% respectively (Moseykin & Ojeda, 2007).

### Estimation of Gains and Losses From Mercosur Trade Policy

To quantitatively estimate the gains and losses from Mercosur trade policy, by which tariff measures to trade are meant, over 1996-2007, the authors propose a method based on the use of coefficient estimates on import tariff retrieved from the regression analysis. This method consists of the following six steps:

Step 1: The average annual growth rate of real GDP PC growth is calculated on the basis of the actual real GDP PC.

Step 2: WTO's Tariff Analysis Online was used as a source of data on simple average of ad-valorem and calculable ad-valorem equivalent of MFN applied HS six-digit import duties. It should be noted that it were the authors who exclusively extracted agricultural products from all the 97 chapters of the HS Nomenclature 2007 Edition and made the necessary aggregation. It should also be noted that when making the above mentioned extraction, the authors also had to refer to the United Nations Standard International Trade Classification, Rev.3 in order to be able to identify the goods to be included into the sample to deal with. Thus, some error term relating to the extraction and aggregation should be implied.

Step 3: The coefficient estimates on tariff  $\beta_1 = -1.25$ ,  $\beta_2 = -1.07$ ,  $\beta_3 = -1.04$  ( $p$ -values are less than 0.05) were taken from the regression growth models with  $F$ -value less than 0.05. In other words, the authors used statistically significant coefficient estimates from statistically significant models only.

Step 4: The predicted growth change as a function of import tariff change  $\Delta \text{growth} \hat{=} \beta_k(\Delta \text{dutfood})$ ,  $k = [1; 3]$  is subtracted from the growth change as a composite function of changes in independent variables  $\Delta \text{growth} = \text{growth}_t - \text{growth}_{t-1}$ , which makes it possible to free growth change from import tariff change. Furthermore, growth, whose change does not include tariff change, is calculated that is  $\text{growth}_k$ . A negative difference between  $\text{growth}_k$  and growth signals that, if there were no change in the tariff, in other words, if the tariff rate had not changed, the actual growth would amount to  $\text{growth}_k$ , which would be less than growth, and vice versa, a positive difference between  $\text{growth}_k$  and growth signals that, if there were no change in the tariff, the actual growth would amount to  $\text{growth}_k$ , which would exceed growth. It should be noted that a negative difference between the two variables takes place when the tariff grows up, and vice versa. In other words, tariff reduction causes higher economic growth rates as compared to the level achieved when the tariff rate is unchanged and, vice versa, tariff growth causes lower growth rates as compared to the level achieved when the tariff rate is unchanged.

Step 5: The real GDP per capita without tariff change is multiplied by the actual population size and compared with the real GDP per capita also multiplied by the actual population size. The author used the calculated value of the real GDP instead of the actual real GDP so that the only difference between the calculated and actual real GDP would be the GDP PC (in the first case, it is the calculated GDP PC without tariff change; in the second case, it is the actual GDP PC).

Step 6: The total of the differences between the calculated and actual GDP when trade liberalization is neglected is presented as a gain from trade liberalization. The total of the differences between the calculated and actual GDP when protectionism is neglected is presented as a loss from protectionism.

Thus, the minimum average gains from Mercosur agricultural trade policy during 1996-2007 amounted to \$30,344.0m or 3.14% of the group's GDP; the minimum average losses amounted to \$10,843.4m or 1.12% of GDP (see Table 5). Paraguay had the largest gains from trade liberalization (4.73% of its GDP over a given period) being followed by Argentina (3.95%), Brazil (2.82%), and Uruguay (1.28%). Argentina had the largest losses from protectionism (3.71%) being followed by Paraguay (1.63%) and Uruguay (0.24%). These estimates are quite impressive on a scale of the entire economy, especially if being compared to Latin America and the Caribbean's spending on education, healthcare, social provision and other social needs which on average do not exceed 5% of their GDP.

Table 5

*Gains and Losses From Mercosur Countries' Agricultural Trade Policy During 1996-2007*

Country	Gains from free trade		Losses from protectionism	
	(US\$*)	(% of GDP)	(US\$*)	(% of GDP)
Mercosur	30,343,916,958	3.14	10,843,385,586	1.12
Of which:				
Argentina	11,365,192,777	3.95	10,677,751,248	3.71
Brazil	18,382,082,758	2.82	0	0.00
Paraguay	339,856,655	4.73	117,326,579	1.63
Uruguay	256,784,768	1.28	48,307,758	0.24

Note. \* Constant 2000 US\$.

## Conclusions

This paper analyzes Mercosur economic growth, trade, and import tariff over the last two decades, identifies and quantitatively estimates the relationship between tariff and growth and evaluates the gains and losses from the group's agricultural trade policy during 1996-2007.

Over the period 1991-2012, the group's economy grew at almost the same robust pace but the beginning of the 2010s was marked with quite a substantial acceleration of economic growth: The average annual real GDP growth rate in the first decade amounted to 3.0%, in the second decade to 3.1%, in the early 2010s to 4.7%. Mercosur growth rates are slightly lower than those of developing countries but substantially exceed the global average and especially those of developed countries. Moreover, in 2009, just after the crisis, real GDP growth of both developed and Latin America and the Caribbean countries that have a very tight historical trade and economic relationship with the former (especially with the U.S. and EU member states) was negative although that of the latter declined to a less significant extent.

Over a given period, Mercosur foreign trade was characterized by a consistent upward trend: Thus, Brazil's trade grew nine times, Argentina's more than seven times, that of the other two countries four to six times. The exceptions to the general trend were the post-crisis 1999 when all the four countries' exports and imports shrank 15% on an annualized basis and the post-crisis 2009 when there was a decrease in one country's exports (Brazil's) and in one country's imports (Argentina's). However, regional trade recovery began in 2010 and in 2011 it surpassed the pre-crisis level.

The group remains the world's leading manufacturer and supplier mainly of agricultural products, fuels and mining products meanwhile there has been no evidence that its industrial sector has actively expanded.

The structure of the group's imports has not significantly changed. Thus, Mercosur imports are comprised mainly by manufactured goods, minerals, and oil.

During 1996-2009, Mercosur import tariff exposed a steady downward trend from 13.0% in 1996 to 11.0% in 2007; however, in response to the global financial crisis of 2008-2009, it hit 11.8% in 2009. The same concerns the global tariff, which was at 9.7% in 1996, at 7.0% in 2007, at 7.1% in 2008, at 6.9% in 2009.

The results of the performed regression analysis showed that a one percentage point tariff reduction leads to a 1.04-1.25 percentage point economic expansion. In other words, it has been proved that, all else being equal, tariff reduction causes higher economic growth rates as compared to the level achieved if the tariff rate is unchanged, i.e., trade liberalization leads to higher real GDP per capita growth rates, and vice versa, tariff increase causes lower growth rates as compared to the level achieved if the tariff rate is unchanged, i.e.,

protectionism leads to lower real GDP per capita growth rates.

The minimum average gains from Mercosur agricultural trade policy during 1996-2007 amounted to \$30,344.0m or 3.14% of the group's GDP; the minimum average losses amounted to \$10,843.4m or 1.12% of GDP. Paraguay had the largest gains from trade liberalization (4.73% of its GDP over a given period) being followed by Argentina (3.95%), Brazil (2.82%), and Uruguay (1.28%). Argentina had the largest losses from protectionism (3.71%) being followed by Paraguay (1.63%) and Uruguay (0.24%).

## References

- Agosin, M. R. (1999). *Trade and growth in Chile (Comercio y crecimiento en Chile)*. Retrieved from <http://www.eclac.cl/publicaciones/xml/4/19194/agosinesp.pdf>
- Ben-David, D. (1993). *Equalizing exchange: Trade liberalization and income equalization*. Retrieved from <http://www.tau.ac.il/~danib/trade-growth/eq-exch.pdf>
- CEPALSTAT. (n.d.). Retrieved from [http://estadisticas.cepal.org/cepalstat/WEB\\_CEPALSTAT/estadisticasIndicadores.asp?idioma=i](http://estadisticas.cepal.org/cepalstat/WEB_CEPALSTAT/estadisticasIndicadores.asp?idioma=i)
- Dollar, D. (1992). *Outward-oriented developing economies really do grow more rapidly: Evidence from 95 LDCs, 1976-1985*. Retrieved from <http://www.tcd.ie/Economics/staff/minnsc/EC4020/dollar%20edcc%201992.pdf>
- Dollar, D., & Kraay, A. (2001). *Trade, growth, and poverty*. Retrieved from <http://www.adb.org/Poverty/Forum/pdf/Dollar.pdf>
- ECLAC Statistical Yearbook'10. (n.d.). Retrieved from [http://websie.eclac.cl/anuario\\_estadistico/anuario\\_2010/eng/index.asp](http://websie.eclac.cl/anuario_estadistico/anuario_2010/eng/index.asp)
- ECLAC. (2009). *Preliminary overview of the economies of Latin America and the Caribbean (Balance preliminar de las economías de América Latina y el Caribe)*. Retrieved from [http://www.eclac.cl/publicaciones/xml/2/38062/2009-898-BPE\\_2009-WEB.pdf](http://www.eclac.cl/publicaciones/xml/2/38062/2009-898-BPE_2009-WEB.pdf)
- ECLAC. (2010). *Preliminary overview of the economies of Latin America and the Caribbean (Balance preliminar de las economías de América Latina y el Caribe)*. Retrieved from [http://www.eclac.cl/publicaciones/xml/8/41898/2010-975-BPE-Book-WEB\\_3-2-11.pdf](http://www.eclac.cl/publicaciones/xml/8/41898/2010-975-BPE-Book-WEB_3-2-11.pdf)
- ECLAC. (2011). *Preliminary overview of the economies of Latin America and the Caribbean (Balance preliminar de las economías de América Latina y el Caribe)*. Retrieved from [http://www.eclac.cl/publicaciones/xml/1/45581/2011-979-BPE-\\_BOOK\\_WEB-CD.pdf](http://www.eclac.cl/publicaciones/xml/1/45581/2011-979-BPE-_BOOK_WEB-CD.pdf)
- ECLAC. (2012). *Preliminary overview of the economies of Latin America and the Caribbean (Balance preliminar de las economías de América Latina y el Caribe)*. Retrieved from <http://www.eclac.cl/publicaciones/xml/4/48594/BalancePreliminar2012.pdf>
- Edwards, S. (1991). *Trade orientation, distortions, and growth in developing countries*. Retrieved from <http://www.nber.org/papers/w3716.pdf>
- Edwards, S. (1997). *Openness, productivity and growth: What do we really know?* Retrieved from [http://www.nber.org/papers/w5978.pdf?new\\_window=1](http://www.nber.org/papers/w5978.pdf?new_window=1)
- Ffrench-Davis, R. (2002). *The impact of exports on growth in Chile (El impacto de las exportaciones sobre el crecimiento en Chile)*. Retrieved from [http://www.eclac.cl/publicaciones/xml/1/19341/lcg2175e\\_FfrenchDavis.pdf](http://www.eclac.cl/publicaciones/xml/1/19341/lcg2175e_FfrenchDavis.pdf)
- Frankel, J. A., & Romer, D. (1999). *Does trade cause growth?* Retrieved from <http://home.hio.no/~ivar-br/fag/intecon/Tradeandgrowth.pdf>
- Klochkovski, L. (2012). Latin America: Contradictory post-crisis development (Латинская Америка: Противоречия посткризисного развития). *Latin America*, 11, 4-20.
- Krueger, A. O. (1997). *Trade policy and economic development: How we learn*. Retrieved from [http://www.law.wisc.edu/gls/documents/trade\\_recommended.pdf](http://www.law.wisc.edu/gls/documents/trade_recommended.pdf)
- Levchenko, I. (2012a). The formation of the export structure of Mercosur countries (Формирование экспортной структуры стран Меркосур). *International Agricultural Journal*, 5, 25-33.
- Levchenko, I. V. (2012b). Estimating the impact of trade policy on economic growth (Оценка влияния торговой политики на экономический рост). *Economics, Statistics and Informatics, UMO Bulletin*, 2, 148-153.
- Moreno-Brid, J. C., & Pérez, E. (2003). *Trade liberalization and economic growth in Central America (Liberalización comercial y crecimiento económico en Centroamérica)*. Retrieved from <http://www.eclac.cl/publicaciones/xml/2/19402/lcg2216e-Moreno-Brid.pdf>

- Moseykin, Y. (2010). *The impact of the financial crisis in Latin America: Anti-crisis measures and perspectives (El impacto de la crisis financiera en América Latina: Medidas anticrisis y perspectivas)*. Moscow-Nice: Economika.
- Moseykin, Y., & Ojeda, E. (2007). *Cyclical tendencies and paradigmatic transformations (Tendencias cíclicas y transformaciones paradigmáticas)*. Retrieved from <http://www.ilaran.ru/?n=458>
- Mulder, N. (2009). *Weak links between exports and economic growth in Latin America and the Caribbean*. Retrieved from [http://www.eclac.org/publicaciones/xml/2/36272/exports\\_economic\\_growth\\_LAC\\_serie\\_91.pdf](http://www.eclac.org/publicaciones/xml/2/36272/exports_economic_growth_LAC_serie_91.pdf)
- RAS Latin American Institute Roundtable. (2011). Latin America: The challenges of the post crisis (Латинская Америка: Вызовы посткризисного периода). *Latin America*, 9, 27-43.
- Razumovsky, D. (2011). Integration process in South America in the beginning of the new century: Initiatives, problems and results (Интеграция в Южной Америке на старте нового века: Инициативы, трудности, достижения). *Latin America*, 4, 10-25.
- Reina, M., & Zuluaga, S. (2008). *Trade and poverty: Comparative analysis of the evidence from Latin America (Comercio y pobreza: Análisis comparativo de la evidencia para América Latina)*. Retrieved from [http://www.eclac.org/comercio/publicaciones/xml/8/33228/serie\\_87\\_COMERCIO\\_PROBREZA.pdf](http://www.eclac.org/comercio/publicaciones/xml/8/33228/serie_87_COMERCIO_PROBREZA.pdf)
- Rodríguez, F., & Rodrik, D. (1999). *Trade policy and economic growth: A skeptic's guide to the cross-national evidence*. Retrieved from <http://www.hks.harvard.edu/fs/drodrik/skepti1299.pdf>
- Rodrik, D. (1999). *The new global economy and developing countries: Making openness work (Overseas Development Council Policy Essay No. 24)*. Washington, D.C.: Johns Hopkins University Press.
- Sachs, J. D., Warner, A., Åslund, A., & Fischer, S. (1995). *Economic reform and the process of global integration*. Retrieved from [http://www.gsid.nagoya-u.ac.jp/sotsubo/Papers/Sachs\\_Warner\\_1995.pdf](http://www.gsid.nagoya-u.ac.jp/sotsubo/Papers/Sachs_Warner_1995.pdf)
- Sánchez, M. V. (2007). *Trade liberalization within CAFTA-DR: Effects on growth, poverty and inequality in Costa Rica (Liberalización comercial en el marco del DR-CAFTA: Efectos en el crecimiento, la pobreza y la desigualdad en Costa Rica)*. Retrieved from [http://www.eclac.org/publicaciones/xml/2/29742/Serie\\_80.pdf](http://www.eclac.org/publicaciones/xml/2/29742/Serie_80.pdf)
- Srinivasan, T. N., & Bhagwati, J. (1999). *Outward-orientation and development: Are revisionists right?* Retrieved from [http://www.econ.yale.edu/growth\\_pdf/cdp806.pdf](http://www.econ.yale.edu/growth_pdf/cdp806.pdf)
- Tybout, J., de Melo, J., & Corbo, V. (1990). *The effects of trade reforms on scale and technical efficiency: New evidence from Chile*. Retrieved from [http://www-wds.worldbank.org/external/default/WDSCContentServer/IW3P/IB/1990/08/01/000009265\\_3960929223040/Rendered/PDF/multi0page.pdf](http://www-wds.worldbank.org/external/default/WDSCContentServer/IW3P/IB/1990/08/01/000009265_3960929223040/Rendered/PDF/multi0page.pdf)
- World Bank. (n.d.). *WDI & GDF*. Retrieved from <http://databank.worldbank.org/ddp/home.do>
- World Trade Organization. (2011). *Tariff analysis online*. Retrieved from <https://tariffanalysis.wto.org/welcome.aspx>
- World Trade Organization. (2012). *Trade and public policies: A closer look at non-tariff measures in the 21st century*. Retrieved from [http://www.wto.org/english/res\\_e/booksp\\_e/anrep\\_e/world\\_trade\\_report12\\_e.pdf](http://www.wto.org/english/res_e/booksp_e/anrep_e/world_trade_report12_e.pdf)