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Abstract

This paper studies the effects of economic integration in Latin America on the margins of trade. The analysis is performed on bilateral exports of goods from eleven member countries of the Latin American Integration Association (LAIA) over the period 1962- 2009. We distinguish the effects of different levels of integration on trade margins; different “timing” and different sectors. Our results provide evidence about the benefits of regional integration. Despite appearing to have contributed most to boosting exports of goods that were already exported rather than to diversification, regional trade integration is in line with LAIA members’ development and industrialization objectives.

Keywords: Regional integration, extensive margin, intensive margin, LAIA, panel data

JEL classification: F14, F15

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DOES ECONOMIC INTEGRATION INCREASE TRADE MARGINS? EMPIRICAL EVIDENCE FROM LAIAS COUNTRIES

1. Introduction

The analysis of the consequences of deepening trade agreements on welfare gains among integrating countries has generated an important discussion in the trade literature (see, for example, Nowak-Lehmann et al, 2007). This type of study appeals to scholars interested in the institutional facets of regional integration. In this line, we argue that “deeper” integration processes and institutions might have larger effects than “shallower” ones, specifically focusing on international trade (exports) consequences.

The interest in determining whether an increase in a country’s exports is due to maintaining and enhancing trade relations over time or to the appearance of new products and markets, has led to the study of the so-called intensive (IM) and extensive margins (EM) of trade. In particular, it is of great importance to study whether increased exports of a country are due to export larger quantities of a given good or to export a wider set of goods. In fact, trade integration may not only imply gains from stronger intensity, but also from new exported varieties of goods that is a potentially important source of welfare gains.

The effect of preferential trade agreements (PTA) on international trade has generally been analysed by the gravity equation, where the dependent variable is the total value of exports (or imports) between two countries and the existence of PTA has been modelled by including a dichotomous variable among the explanatory variables (Carrère, 2006; Martínez-Zarzoso et al, 2009). Most of these articles are based on a version of the gravity model that assumes homogeneous firms and consumer preference for variety. These two assumptions imply that all products are traded with all destinations.

However, empirical evidence indicates that only a few firms export and these exporters sell to a limited number of countries. This situation has led to the development of new

theories regarding international trade based on the heterogeneity of firms (only the most productive export) and the existence of fixed exporting costs (Melitz, 2003).

The present article focuses on Latin America for three main reasons. First, this type of analysis is relevant in a region where the commitment to economic integration is frequently questioned, as proved by the suspension of Paraguay as a member of Southern Common Market (Mercosur). Second, there have been a series of efforts to intensify trade relations between the European Union (EU) and Latin America. However, negotiations have been suspended, as a number of countries in the region feel that the EU pushes for concessions that would undermine domestic industries. Meanwhile, negotiations over an association agreement with the Mercosur have been on hold since 2004 (EUobserver, 2009). Third, as regional integration reinforces pre-existing patterns of trade interdependences (Krapohl and Fink, 2013), diversification from traditional exports to non-traditional exports may have not changed significantly.

In order to analyse the effects of economic integration in Latin America on the IM and EM, the study is performed for bilateral exports of the members of the Latin American Integration Association (LAIA) over the period 1962-2009. Recently, Lee and Kim (2012), by focusing on export data of 150 developing and developed countries to 26 European Union countries in 2007, find that trade facilitation procedures have more impact on increasing trade at the EM than at the IM, although more advanced trade facilitation levels have diverse effects depending on export sector and income level of countries. Therefore, we might expect that “deeper” trade integration presented higher positive consequences on the EM than on the IM if we focused on a sample that included developed countries, and in a particular year. Otherwise, we focus on a heterogeneous sample of developing countries in a geographical region (Latin America), and we aim to take into account the dynamics of the trade integration processes existing in that region.

Lee and Kim (2012) find that the effect of trade facilitation differs by sector. They distinguish between primary and manufactured goods and then, when taking into

account Latin American countries, the analysis is extended to three sectors for a better understanding of the consequences of trade integration processes on trade margins: 1) primary goods and agricultural manufactures; 2) industrial manufactures and 3) mineral fuels, lubricants and related materials.

Obtained results show that deeper trade agreements have a greater positive impact on trade margins than shallower PTA, and that the LAIA countries have increased the EM of industrial manufactures as a result of their participation in PTA with countries in other regions and LAIA itself. In addition, the results show that deeper Latin American trade integration has increased the IM for primary goods and agricultural manufactures. These results lead us to recommend an effort on the appropriate mechanisms to ensure that trade agreements have continuity over time and promote greater engagement in line with the expansion and not exclusion of the member countries.

This article is divided into five parts: after the introduction, section 2 reviews the process of economic integration in LAIA countries and section 3 describes the methodology. Section 4 includes data and a brief description of the LAIA countries' exporting performance. The empirical analysis is carried out in section 5. Finally, the last section concludes.

2. The Latin American integration process

The expanding heterogeneity among economies in Latin America makes that we cannot speak of a homogeneous continent (García de la Cruz and Sánchez Díez, 2008). A number of issues, such as the membership of Mexico in NAFTA, Brazil as a regional hegemon and rather impressive patchwork of integration projects, turn the region in a very special and interesting case to study. Phillips (2005) pointed out that "the most salient traits of the contemporary Americas are those of heterogeneity, diversity and divergence. These operate along a wide variety of axes [...], but most

relevant to our purposes here is that which derives from the widely divergent economic and trade structures of the economies of the region.”¹

With regards to economic integration agreements, the group of eleven Latin American countries under analysis signed a significant number of EIAs over the period 1962-2009 (Tables A.1, A.2 and A.3 in the Appendix summarise this information. Note that these tables contain the existing agreements to the year 2009, so the evolution from shallow to deep EIAs is not shown).² First, the 1960 Montevideo Treaty created the Latin American Free Trade Association (LAFTA), signed initially by Argentina, Brazil, Chile, Mexico, Paraguay, Peru and Uruguay and as of 1970, LAFTA had expanded to include four more nations: Bolivia, Colombia, Ecuador, and Venezuela. The signatories hoped to create a common market in Latin America and offered tariff rebates among member nations. LAFTA came into effect on January 1962 and was superseded in 1980 by the Latin American Integration Association (LAIA). Cuba was the last country to accede, becoming a full member of LAIA in 1999. LAIA is nowadays the largest Latin American integration group and includes all the eleven exporting countries included in the analysed sample of countries.

Second, the Andean Pact came into existence with the signing of the Cartagena Agreement in 1969 by Bolivia, Chile, Colombia, Ecuador and Peru. In 1973, the pact gained its sixth member, Venezuela. In 1976, however, its membership was again reduced to five when Chile withdrew. Venezuela announced its withdrawal in 2006, reducing the Andean Community to four member states. The Andean Community (or CAN, called the Andean Pact until 1996), is nowadays a customs union.

Third, the Mercosur was created in 1991 by the Asuncion Treaty and was signed initially by Argentina, Brazil, Paraguay and Uruguay. It should become a customs union in 1995, but in practice it is still an imperfect customs union (Phillips, 2005). Bolivia and

¹ Phillips, 2005, p. 187.

² Table A.1 lists the trade agreements of LAIA members with other EIAs; Table A.2 lists the bilateral trade agreements of LAIA members with third countries and Table A.3 lists the countries involved in the Generalized System of Preferences.

Chile have been associate members since 1996; Peru since 2003; Colombia and Ecuador since 2004. Venezuela has been incorporated, while Paraguay was suspended in 2012. Bolivia has been an accessing member since December 2012.

Recently, following the new cooperation agreement with Mercosur, the Andean Community gained four new associate members: Argentina, Brazil, Paraguay and Uruguay. These four Mercosur members were granted associate membership in 2005. Countries in other regions have also signed agreements with LAIA members. For example, over the time period considered, the EEA³ has signed an integration agreement with Chile and Mexico, the CARICOM with Colombia and Venezuela, while Canada, Mexico and the United States have signed the NAFTA. Finally, Chile signed the Trans-Pacific Strategic Economic Partnership with Brunei, New Zealand and Singapore in 2007 (Table A.1).

Chile has signed the largest number of bilateral agreements in the region: with Bolivia, Canada, China, Colombia, Costa Rica, El Salvador, Honduras, India, Japan, Mexico, Korea, Panama, Peru, Venezuela and the United States (Table A.2). In fact, Chile has undergone the farthest-reaching liberalisation process in the Latin American region over the period 1994-2008 and together with Mexico seems to have liberalised relatively more within other integration agreements, such as the NAFTA and the EU, than within LAIA (Florensa et al, 2011). Mexico is also worth highlighting for having signed a number of important bilateral agreements: it signed EIAs with Bolivia, Chile, Colombia, Costa Rica, Israel, Japan and Nicaragua. Other bilateral agreements are Guatemala-Venezuela and Peru-United States (Table A.2).

An important number of developed countries have signed non reciprocal agreements with developing countries. For example, Japan and Norway in 1971; New Zealand in

³ The European Free Trade Association (EFTA) is a trade block created in 1960 by Austria, Denmark, the United Kingdom, Norway, Portugal, Sweden and Switzerland. Finland became a member in 1961, Iceland in 1970 and Liechtenstein in 1991. Following the abandonment of EFTA and the entry into the European Community of the United Kingdom and Denmark in 1973, Portugal in 1986, Austria, Sweden and Finland in 1995, the importance of EFTA diminished. Nowadays, this block consists of Switzerland, Iceland, Liechtenstein and Norway and they have a free trade area with the EU (European Economic Area, or EEA for its acronym in English).

1972; Australia and Canada in 1974; Russia in 1994; and Turkey in 2002 all signed the Generalised System of Preferences with all the LAIA countries (Table A.3).

Tables A.1 to A.3 show the gradual disappearance of new agreements under the Generalised System of Preferences, which granted concessions by developed countries to developing ones, as well as the proliferation of bilateral agreements between countries in the region and between countries and trading blocks that already existed.

At a time of global reconfiguration of the region not only in economic but also in political and social aspects, it has been expanded the debate in Latin American countries about which integration model to adopt in the future. The supposed ideological affinity of many South American leaders has not been enough to solve the integration model on which the region wants to advance (Delich and Peixoto, 2011).

The coexistence of the Union of South American Nations (USAN) which was constituted in the year 2008 and consists of Argentina, Bolivia, Brazil, Colombia, Chile, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay and Venezuela with Mercosur and to some extent with the CAN; the LAIA; the Latin American Economic System (LAES⁴); the Bolivarian Alliance for the Peoples of Our America (BAPA⁵), the Pacific Alliance from April 2011 (Chile, Colombia, Mexico and Peru) and the Community of Latin America and the Caribbean (CELAC⁶) give the impression that there is a large overlap of functions and powers.

In a context of economic recovery in the countries of the region, Mercosur, which is expected to have been the most successful project of regional integration, was re-launched in Asunción Summit in mid-2003 with the participation of Bolivia, Chile and Venezuela as invited countries.

But Mercosur trade agenda seems to be stalled for several years and some of its member countries are not very committed to the objectives set at the time of its

⁴ <http://www.sela.org/view/index.asp?ms=258&pageMs=26208/> 28 member countries.

⁵ <http://www.alianzabolivariana.org/> 9 member countries

⁶ <http://www.celac.gob.ve/> 33 member countries

incorporation. What is most at issue is the role of the smaller economies (Uruguay and Paraguay) and the measures that unilaterally adopt countries like Argentina which has led President of Uruguay José Mujica recently to state "Argentine economic policy undermines integration and shatters the Mercosur".⁷

Then, it seems that a new stage of regional integration is starting in Latin America. Peña (2011) states that this affirmation is based on factors such as the emergence of a large number of options in the insertion of each Latin American country to world markets; mainly due to the increasing number of players and to the fact that shorter distances make that several choices can be exploited simultaneously. An additional factor that determines the present *momentum* towards new forms of integration in the region is the increasing dissatisfaction in the results obtained with the processes that are currently into force. Therefore, further knowledge of the consequences that the dynamics of "shallow" versus "deep" economic integration has had in Latin America, in terms of trade margins, and in different sectors, is highly desirable. The present paper aims to fill this gap in the existing literature.

3. Methodology

The methodology in Hummels and Klenow (2005), hereafter referred to as HK, used bilateral trade flows at a high level of disaggregation of products seeking to explain the growth in exports by major exporting "quantities" of a particular good (IM) or a wider range of goods (EM). Therefore, the methodology in HK makes it possible to compute the so-called "goods" margins of trade. Among the studies that analyse the effects of economic integration agreements on trade margins, it is worth mentioning Hillberry and McDaniel (2003) and Kehoe and Ruhl (2009) for NAFTA; and Bensassi et al. (2012) for the effects of the Barcelona Process on North African countries.

⁷Mujica dijo que Argentina "hace añicos al Mercosur", 11 de noviembre de 2013. In http://www.clarin.com/politica/Mujica-Argentina-maneja-boconeando-pamento_0_1021698189.html

The present article uses the methodology in Baier et al (2011) and Baier et al 2013, hereafter referred to as BBF and BBF2013 (respectively), to measure the effects of four types of economic integration agreements on the eleven member countries of LAIA: a) nonreciprocal or one-way preferential trade agreements (NRPTA), generally entail concessions by an industrialized country to less developed countries; b) reciprocal or two-way preferential trade agreements, or PTA; c) free trade agreements (FTA), if the members of a preferential area go so far as to eliminate all tariffs and quantitative import restrictions among themselves and d) customs unions (CU), whereby the members of an FTA go beyond removing trade barriers among themselves and set a common level of trade barriers for third countries.

By using a panel of bilateral trade flows of goods for a large number of countries and for the period 1962-2009, we will distinguish the effects of different levels of integration in the signed arrangements. The length of this period will allow us to study the short and long-term (“timing”) effects, as well as covering the proliferation of regional trade agreements after the World War II, while excluding the last international financial crisis.

The present study considers the following gravity equation:

$$\ln\left(\frac{X_{ijt}}{Y_{it}Y_{jt}}\right) = \beta_0 + \beta_1(\ln DIST_{ij}) + \beta_2(CONTIG_{ij}) + \beta_3(COMLANG_{ij}) + \beta_4(EIA_{ijt}) - \ln\Pi_{it}^{1-\delta} - \ln P_{jt}^{1-\delta} + \varepsilon_{ijt} \quad (1)$$

Where \ln denotes natural logarithms, X_{ijt} is the value of the aggregate export flow from country i to country j in year t , Y_{it} (Y_{jt}) is gross domestic product, or GDP, in country i (j) in year t , $DIST_{ij}$ is the bilateral distance between the economic centres of i and j ; $CONTIG_{ij}$ is a dummy variable assuming a value of 1 if the two countries share a common land border (and 0 otherwise); $COMLANG_{ij}$ is a dummy variable that takes a value of 1 if the two countries share a common language; EIA_{ijt} is a variable indicating the level of integration between the two countries in year t , and $\ln\Pi_{it}^{1-\delta}$ ($\ln P_{jt}^{1-\delta}$) is

exporter i 's (importer j 's) non-linear and unobservable multilateral resistance (price) term.

Regarding estimating the effects of economic integration agreements, or EIA (β_4), if this variable is correlated with the error term, it is econometrically endogenous and ordinary least squares can lead to biased and inconsistent coefficient estimates for β_4 . BBF argues that endogeneity bias is due to self-selection of country pairs into EIA. In order to eliminate endogeneity bias from the variable EIA, they propose the use of panel techniques and estimation by fixed effects (FE) of the following equation (Specification 1):

$$\ln X_{ijt} = \beta_0 + \beta_1 EIA_{ijt} + \eta_{ij} + \delta_{it} + \psi_{jt} + \varepsilon_{ijt} \quad (2)$$

Where η_{ij} is a country-pair fixed effect to capture all time-invariant bilateral factors influencing nominal trade flows; δ_{it} and ψ_{jt} are exporter-time and importer-time fixed effects, respectively, to capture time-varying exporter and importer GDP, as well as all other time-varying country-specific effects that are unobservable in i and j and influence trade, including the exporter's and importer's multilateral price resistance terms.

In order to address the issue of the "timing" effects of EIA, BBF use an additional specification:

$$\ln X_{ijt} = \alpha_0 + \alpha_1 EIA_{ijt} + \alpha_2 EIA_{ijt-5} + \eta_{ij} + \delta_{it} + \psi_{jt} + \varepsilon_{ijt} \quad (3)$$

And BBF2013 uses a "random growth" model in differences:

$$\Delta_5 \ln X_{ijt} = \gamma_0 + \gamma_1 (\Delta_5 EIA_{ijt}) + \gamma_2 (\text{Lag} \Delta_5 EIA_{ijt}) + \delta_{it} + \psi_{jt} + \eta_{ij} + \Delta_5 \varepsilon_{ijt} \quad (4)$$

First, Specification 2 (equation 3) generalizes Specification 1 (equation 2) by including one lag of the EIA variable to distinguish between current and lagged effects (EIA_{ijt-5}).

Second, Specification 3 (equation 4) is based on the fifth-differencing (FD) of Specification 2 and avoids the problems stemming from potential serially correlated errors and unit-root processes for RHS variables in specification 1 and 2. Following Baier and Bergstrand (2007), BBF and BBF2013, we allow various types of EIA, allow

for lagged effects and then consider a five-year lag ($\Delta_5 EIA_{ijt}$: difeia) and a further lag of 5 to 10 years ($Lag\Delta_5 EIA_{ijt}$: difeialong). However, while Baier and Bergstrand (2007) and BBF worked with 5-year interval data, we work with yearly data for the entire period, as done by Soete and Hove (2013) for European agreements and BBF2013 for a sample of 149 countries.

In the empirical analysis, we estimate Specifications 1, 2 and 3, whereby X_{ijt} might denote the value of exports of goods from country i to j in the year t (TRADE), the EM or the IM.

In order to obtain the EM and the IM, we employ the methodology developed in HK. If X_{ijt} is the value of country i 's exports to country j in year t , the extensive margin of goods exported from i to j in any year t is defined as:

$$EM_{ijt} = \frac{\sum_{m \in M_{ijt}} X_{wjt}^m}{\sum_{m \in M_{wjt}} X_{wjt}^m} \quad (5)$$

Where X_{wjt}^m is the value of the world's exports to country j in product m in year t ; M_{wjt} is the set of all products exported by the world to country j in year t and M_{ijt} is the subset of all products exported from i to j in year t . Hence, EM_{ijt} is a measure of the fraction of all products that are exported from i to j in year t , whereby each product is weighted by the share that product represents of world exports to j in year t .

HK define the intensive margin of goods exported from i to j in year t as:

$$IM_{ijt} = \frac{\sum_{m \in M_{ijt}} X_{ijt}^m}{\sum_{m \in M_{ijt}} X_{wjt}^m} \quad (6)$$

Where X_{ijt}^m is the value of exports from i to j in product m in year t . IM_{ijt} represents the market share of country i in country j 's imports from the world within the set of products that i exports to j in year t .

Two aspects worth indicating when applying this methodology are: a) that due to using estimations with fixed effects and fifth-differences in the empirical section, the term $\ln X_{jt}$ is included in the fixed time-importer effects ψ_{jt} ; b) and following BBF, HK

methodology can be used in a panel that permits the use of the indicators employed in the construction of EM_{ijt} and IM_{ijt} such that they vary over time.

4. Empirical analysis

4.1 Data

In order to perform the empirical analysis, two main sources of data have been used: bilateral trade flows and a categorical variable representing the level of economic integration the agreement entails. For the construction of the database, bilateral trade flows for the period 1962-2009 were taken into account. Trade data for the period 1962-2000 were obtained from the NBER- United Nations trade data set, available at <http://cid.econ.ucdavis.edu/data/undata/undata.html> and documented in Feenstra et al. (2005), whereas WITS (COMTRADE) was used for the period 2001-09. In both cases, the data are classified according to 4-digit Standard Industrial Trade Classification (SITC), Revision 2. The exporting countries are the 11 members of LAIA (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Paraguay, Venezuela and Uruguay) while the importers are the 161 destination countries that are available in Feenstra et al. (2005). In addition, we had to build a database with the same characteristics (period and classification of goods) considering the world as an exporter and the 161 destination countries as importers in order to calculate the margins of trade.

The variable indicating the level of integration between country pairs takes the form of a polychotomous index built by BBF and is available at www.nd.edu/jbergstr/. BBF's indexes were checked by the documents available in this database and also by the EIA set out in the website of the World Trade Organization (WTO). We have completed the polychotomous index for 2006 onward for our sample of countries.

The index is defined as follows: (0) when there is no EIA; (1) when the agreement is asymmetrical or one-way (NRPTA); (2) corresponds to two-way preferential trade

agreements (PTA); code (3) defines free trade agreements (FTA) and (4) refers to customs unions (CU).

The way trade integration is measured through this polychotomous index is questionable: it might be argued that the reality of a trade integration agreement is poorly represented by an index that can take only four values. With this methodology a customs union takes the value 4 as compared to a FTA which takes the value 3, however, if *i* and *j* are country members of a trade agreement and *k*, a country which is not member of this agreement, when *i* and *j* move up from a FTA to a customs union it might not imply automatically an increase of trade between *i* and *j* since the adoption of a customs union may lead to a decrease of tariffs applied by saying *i* on products coming from *k*; in that case, other things being equal, trade between *i* and *j* might decrease. Nonetheless, this type of index is useful in an analysis where the aim is to distinguish the consequences of “shallow” and “deep” integration agreements on trade.

4.2 Regional export performance

Interestingly, Latin American countries follow two different strategies with regards to regional integration. On the one hand, a strategy of continuity is shown by countries such as Mexico, Peru, Colombia and Chile; on the other hand, countries such as Venezuela propose other alternatives of regional integration (García de la Cruz and Sánchez Díez, 2008). Therefore, the purpose of this sub-section is to show the heterogeneity of export patterns (by sector and destination) in LAIA countries and its contextualization on the world economy, as a descriptive analysis previous to the main empirical analysis that specifically studies the effect of EIAs on trade margins.

Figures 1-12 in the Appendix show the changes in export share by different sectors. In this article, we consider three sectors: primary goods and agricultural manufactures (sector 1, codes 0, 1, 2 and 4 of the SITC); industrial manufactures (sector 2, codes 5, 6, 7, 8 and 9 of the SITC) and mineral fuels, lubricants and related materials (sector 3, code 3 of the SITC).

Major differences are observed when each of the eleven countries is considered. Brazil and Argentina show greater export diversification manifested in a significant increase in the export share of industrial manufactures and a decrease in primary goods and agricultural manufactures. Chile displays the opposite trend. Exports have grown but with a tendency to a greater relative share of agricultural manufactures and declining importance of industrial manufactures.

Colombia and Ecuador have diversified their exports recording an increase in the share of industrial manufactures and mineral fuels, lubricants and related materials. Bolivia's exports have concentrated as mineral fuels, lubricants and related materials have risen to account for approximately 50 per cent while a substantial fall is observed in the other two sectors.

In Peru, agricultural and industrial manufactures represent almost 50 per cent of exports, the third sector, which had accounted for almost 25 per cent in the 80s, registering a significant loss. Paraguay exports 80-90 per cent of primary goods and agricultural manufactures while the rest are industrial manufactures; this structure has remained unchanged throughout the period.

Mexico displays the most important change in the structure of its exports: 80 per cent are industrial manufactures (at the beginning of the period, that sector only accounted for 20 per cent) and primary goods and agricultural manufactures do not even represent 10 per cent; also, mineral fuels, lubricants and related materials, which accounted for 60 per cent in the 1980s, have witnessed a decrease to only 12 per cent in recent years. Venezuela has concentrated its exports in mineral fuels, lubricants and related materials (80 per cent) and has recorded a slight increase in the share of industrial manufactures.

Figures 13-24 in the Appendix show the structure of exports by destination. Considering the eleven countries in the region (figure 13), it appears that there was an increase in the share held by the USA and Canada as the main destination due to the relative importance of Mexico's exports (with a slight decrease in recent years). LAIA

and the EU share similar percentages (15 per cent); while Asian countries + Japan and China have a small stake in the group.

In Argentina (figure 14), traditional markets such as the EU and the USA + Canada became less important as exports to countries in the region increased, especially in the 1990's, but with a subsequent stagnation. In recent years, new markets have emerged for Argentina, including ASEAN + Japan, China and Africa.

Figure 15 shows the main destinations for Bolivia exports. There is a significant decrease in the EU and a significant increase in the participation of LAIA as a destination. Towards the end of the period, Bolivian exports became highly concentrated within the region. Exports to the USA + Canada exhibit fluctuations throughout the period and stabilized at the end with a share of around 9 per cent. The new destinations that appear in some of the other countries in the region, such as Asian countries, are relatively unimportant.

Brazil began the period with exports being highly concentrated in only two destinations (the USA + Canada and EU15, share of 80%). At the end of the period, destinations are more diversified as the USA + Canada, EU and LAIA share around 21,15 and 24 per cent respectively. Brazil has not had a major market in the region like Argentina, Bolivia, Paraguay and Uruguay. ASEAN + Japan, and Africa have remained stable over time and are less important as destinations for Brazilian exports but China appears as a new important destination (see figure 16).

The situation in Chile is similar to that of Brazil. Chile's exports were highly concentrated in only two markets (the USA + Canada, and the EU) at the beginning of the period. LAIA participation as a destination for Chilean exports has fluctuated, reaching 22 per cent in the 70s and finishing the period with only 17 per cent. The group of ASEAN countries + Japan appear as destinations earlier than in the rest of Latin American countries and their share has remained stable over the years, standing at 22 per cent in 2005. Along with Brazil, Chile is the most diversified country in terms of export destination (see figure 17).

The most important destination for Colombia's exports is the USA + Canada (around 40 per cent in recent years). Next in order of importance is LAIA, but only with 30 per cent; the EU has reduced its share as a destination for Colombian exports from 32 per cent to 14 per cent (see figure 18).

The USA + Canada have been an important destination for Ecuador exports. At the beginning of the period they accounted for 46 per cent and later 65 per cent before returning to a share of about 43 per cent in 2009. Ecuador's exports to countries in the region have been very volatile, but have stabilized at around 20 per cent in recent years, while the EU has lost ground as an export destination (see figure 19).

Mexico is characterized by highly concentrated exports to USA + Canada; at the end of the period under study, 85 per cent of Mexico's exports were bound for that market. The relative share of the EU and ASEAN + Japan has been declining over time to very small values (see figure 20).

Paraguay sells the bulk of its exports to Latin America (about 65 per cent). The EU and the USA + Canada, which shared the market equally at the beginning of the period, have witnessed a considerable loss in relative importance. In recent years, China and Asean + Japan appear as Paraguayan export destinations, but both only account for 6 per cent of the market (see figure 21).

Peru begins and ends the period with a highly diversified market for their exports. The EU has lost share, while the USA + Canada destination displays fluctuations, but was still the most important destination at the end of the period. LAIA countries were never very important export destinations for Peru; in recent years, they have represented about 18 per cent (see figure 22).

LAIA countries increased their share of Uruguayan exports from 10 per cent at the beginning of the period to 55 per cent in the 90s; the figure stood at 42 per cent in 2009. The EU has lost importance as a destination for Uruguayan exports (from 65 per cent to only 20 per cent). In recent years, ASEAN + Japan, China and Africa have emerged as export destinations (see figure 23).

Venezuela is one of the countries in the region with a highly concentrated export market. The USA + Canada increased their relative importance and accounted for 50 per cent by the end of the period. Only 10 per cent of Venezuelan exports are bound for LAIA countries, while the EU has seen its share of exports drop to only 11 per cent (see figure 24).

5. Main Results

5.1 All Goods

We first study whether EIA signed by LAIA members have positively affected the IM and EM and whether the deepest integration agreements have had a greater impact on trade margins. BBF has already explored the effects on trade margins of alternative types of EIA, finding that deeper integration agreements have a greater impact on trade flows than shallower agreements. Therefore, customs unions are expected to have a more significant effect than partial trade agreements.

Columns 1-3 in Table 1 show the results obtained when specification 1 is estimated,⁸ i.e. without lags for the variables of interest. The results show that for the deepest EIA (CU), trade, EM and IM coefficients are positive and statistically significant, and the effect on IM is larger than on EM. Specification 1 has also been estimated using typical time-invariant bilateral gravity variables and excluding country-pair dummies, as in equation (1).⁹ Similar conclusions hold for the variables of interest. Furthermore, the coefficient estimates for distance display similar values to those in the gravity-equation literature for aggregate trade flows and are statistically significant. The variable contiguity is not statistically significant and language is positive and significant on the EM.¹⁰

⁸ Each table reports the results for three alternative LHS variables: bilateral trade, EM and IM, respectively. Additionally, we have vertically ordered the list of existing EIA from shallower to deeper economic integration.

⁹ The variables to complete the gravity equation presented in (1) (distance, contiguity and language) were obtained from the CEPII website.

¹⁰ These results are available upon request from the authors.

Second, we study the relative effect of EIA on trade margins in the short and long-term. Previous work showed that immediately after trade agreements come into force, the IM is affected more than the EM (Bernard et al, 2009). In the same vein, BBF find that short-term effects are mainly reflected in the IM, while in the long term, the most important effect is reflected in the EM.

Then, we test whether positive effects are more persistent over time in trade margins among Mercosur and Andean Community countries, which have a deeper level of integration (CU; see Table A.1). Furthermore, the largest Latin American integration group (LAIA), as well as other integration agreements in which developed countries are involved (PTA or FTA) could be beneficial for trade margins in the long term: the predecessor of LAIA existed since the 60s and other regional areas have shown greater commitment to signing economic integration agreements than Latin American countries (see, for example, the case of the European Union).

Table 1 also shows the results obtained when specification 2 is estimated, which includes lagged values of EIA dummies. The results obtained in columns 4-6 show a positive and significant coefficient for the 5-year lag of FTAs and the 5-year lag of the variable CU on the IM. Results show that the CU has the largest positive effect on both margins of trade, but it is in the IM of trade where the positive and significant effect of economic integration seems to persist after 5 years.

As a sensitivity analysis to ensure that the decision on the number of lags does not affect the main results, a variant of equation (3) that includes a 10-year lag is also estimated. The previous results are confirmed; in addition, this set of regressions shows that the only 10-year lag that is significant is the one corresponding to FTAs on the IM. These results indicate that it is worth taking into account long-term effects when analysing the effect of regional integration in Latin American countries.

Finally, when we follow BBF and BBF2013 in estimating the panel dataset by difference techniques, the results obtained display a positive and significant effect on the IM for the lagged change in the deepest integration agreements (CU), in line with

results obtained in Specification 2. Nonetheless, for the lagged change, the existing CUs in Latin America have had a negative and significant effect on the EM of trade. Consequently, the overall effect on trade is not statistically significant. The estimated coefficients for shallower EIA are not statistically significant.¹¹ In order to improve our understanding of the results obtained, we go further by running different regressions for exports included in different sectors, as we believe these results may arise from aggregation bias.

5.2 By Sector

We analyse the effect of Latin American agreements on different sectors, as well as the “timing” effects of EIA that might differ by type of product. Chaney (2008) shows that when goods are homogeneous and have a high elasticity of substitution, the IM is sensitive to changes in trade barriers while the EM is relatively minor. In contrast, when goods are differentiated and have low elasticity of substitution, lower tariffs on imports will allow firms with lower levels of productivity to enter new markets, thereby affecting the EM. More recently, Bensassi et al. (2012) found that the effect on the IM is stronger for products in which the elasticity of substitution is higher within the Barcelona process. However, they only focused on manufactured products (categories 5 to 8 of SITC). In this article, we consider three sectors: primary goods and agricultural manufactures, industrial manufactures and mineral fuels, lubricants and related materials.

Two possible effects might emerge; on the one hand, as LAIA countries have a comparative advantage in agriculture, trade margins might be more time-sensitive to changes in trade liberalization in primary goods and agricultural manufactures. On the other hand, trade liberalization might be fostering growth in industrial manufactures to a greater extent, as trade margins in this sector would be more time-sensitive to changes

¹¹ These results are available upon request from the authors.

in regional integration. The predominance of the first effect might be related to trade policy issues in multilateral discussions, as this type of goods was exempt until the Uruguay Round, and not much progress has been made in relation to import quotas, tariffs and subsidies even under the Doha Round. Otherwise, the predominance of the second effect would provide evidence in favour of the welfare gains of EIA in the Latin American countries, in line with the development and industrialization objectives in the region.

Tables 2-4 show the results of our sectoral regressions. Table 2 shows the results obtained when specification 1 is estimated for the three sets of products. As in the case where all the goods are pooled together, the deepest integration agreements have a larger effect on the margins of trade than PTAs and FTAs for sectors 1 and 2. Furthermore, the IM is higher in magnitude than the EM. Finally, in mineral fuels, lubricants and related materials trade integration displays a positive and significant effect on the EM of trade for NPTA, FTA and CU.

Table 3 shows the results obtained when specification 2 with the additional 10-year lag is estimated for sectors 1, 2 and 3. The results obtained show a positive and significant coefficient for the 10-year lag of PTAs on both the EM and the IM, the 10-year lag of the variable CU on the IM and the 10-year lag of FTAs on the IM for primary goods and agricultural manufactures. Results show that the FTA and CU have the largest positive effect on trade, and that this positive and significant effect of economic integration seems to persist after 10 years on the IM in sector 1.

Long-term effects are positive and significant on the IM for FTAs and CUs (in the 5-year lag) in sector 2 and on the EM for PTAs and FTAs (in the 10-year lag) in sector 3. Unlike the results for all the goods pooled together, non-reciprocal agreements have a positive and significant effect on the IM for primary goods and agricultural manufactures.

In summary, the different levels of EIA register a positive and significant (and larger) coefficient on the IM of trade in the sector of primary goods and agricultural

manufactures. These results are in line with expectations, as the impact of trade liberalization is stronger in the case of the IM for goods with high elasticities of substitution.

Table 4 shows the results for specification 3. The results obtained for primary goods and agricultural manufactures show that both a positive effect of CU on the IM and a negative effect of CU on the EM coexist, but only in the short term. Therefore, the effect of trade liberalization is felt sooner on trade margins in more homogeneous goods. These results also show the non-significant effects of shallower integration agreements on exports of primary goods and agricultural manufactures, as well as the positive effects of preferential trade agreements on the EM in the long term in the case of industrial manufactures.

Specification 3 provides partial evidence in favour of the welfare gains of EIA in the Latin American region, as regional integration is in line with its development and industrialization objectives. According to the results obtained, LAIA countries have increased their diversification of the industrial export matrix and hence the structure of domestic industrial production, as a consequence of becoming involved in preferential trade agreements with countries in other regions and LAIA itself (increase in the EM). Furthermore, we show that “deep” Latin American trade integration has increased the concentration of the export matrix of primary goods and agricultural manufactures (increase in the IM). The fact that trade margins are more sensitive to changes over time in the liberalization of the sector of primary goods and agricultural manufactures might be due, at least to some extent, to trade policy issues as regards sensitive goods in multilateral discussions, and then the effect of trade liberalization in a highly protected sector tends to be stronger when an agreement in tariff matters has not been reached.

6. Conclusions

In terms of economic policy, the extensive margin in a *pure* sense of the term can be defined as those exports that provide new market entrants, while the intensive margin in a *pure* sense is due to continued growth in sales of old exporters to the same destinations. This article analyses the consequences of Latin American integration on trade margins by following a methodology introduced by BBF. To the best of our knowledge, no other studies have applied this methodology distinguishing exporters from specific and so heterogeneous geographical regions as is the case of Latin America, and using yearly trade data. Furthermore, differential “timing” (short and long term) is approached more accurately than in previous research.

Our results show that intensive and extensive margins of trade are positively affected by regional trade liberalization in the case of deeper integration agreements. Obtaining these results when LAIA countries are isolated is highly relevant to convince policy-makers about the welfare gains of EIA, as commitment to economic integration is frequently questioned in the LAIA region. Furthermore, when exports from members of “deep” integration agreements such as the EU are included in the same dataset, results might be misleading.

Also where deeper integration agreements are concerned, EIA have a larger impact on the intensive margin than the extensive margin. Moreover, when differential “timing” effects are considered, the positive effects of regional trade integration are found to be more persistent over time in the case of the intensive margin than the extensive margin. Hence, regional trade integration among LAIA members appears to have contributed more to increasing exports of goods that were already exported than exports of new goods.

Finally, unlike other articles which study the effect of integration agreements on trade margins only in industrial manufacturing or where different types of goods are pooled together, we focus on the differential impact of economic integration in three sectors: primary goods and agricultural manufactures; industrial manufactures and mineral

fuels, lubricants and related materials. The results obtained show that deeper EIA have a greater effect in the case of primary goods and agricultural manufactures than industrial manufactures in the short term, but regional trade liberalization seems to foster the development of the industrial manufacturing sector to a greater extent in the long term. As a result, we provide evidence in favour of the welfare gains of EIA in the Latin American region, as regional integration is in line with its development and industrialization objectives.

In view of the economic instability that characterizes the region, further research on different time periods would confirm whether or not the results for the whole period might be generalized according to the historical period under consideration, for example, before and after the Latin American crises.

Table 1. Main results for Specification 1 and 2, all goods

	Specification 1: All goods			Specification 2: All goods			Specification 2: All goods		
	TRADE(1)	EM(2)	IM(3)	TRADE (4)	EM (5)	IM (6)	TRADE (7)	EM (8)	IM (9)
NRPTA	-0.288***	-0.027	-0.263***	-0.270***	-0.173**	-0.097	-0.232**	-0.126	-0.106
	-2.906	-0.325	-2.781	-2.627	-2.141	-0.988	-2.201	-1.570	-1.049
L5.NRPTA				-0.007	-0.020	0.014	-0.073	-0.132	0.059
				-0.056	-0.211	0.115	-0.590	-1.403	0.498
L10.NRPTA							-0.064	0.028	-0.091
							-0.376	0.215	-0.563
PTA	-0.007	0.123**	-0.130*	-0.100	-0.106	0.006	-0.078	-0.111	0.033
	-0.088	2.014	-1.832	-1.086	-1.461	0.066	-0.770	-1.443	0.342
L5.PTA				0.078	0.090	-0.011	-0.064	-0.136*	0.072
				0.883	1.285	-0.134	-0.604	-1.690	0.711
L10.PTA							0.076	0.069	0.006
							0.780	0.940	0.068
FTA	0.313***	0.185**	0.129	0.183*	0.065	0.118	0.181*	0.055	0.126
	3.521	2.527	1.519	1.928	0.873	1.301	1.833	0.731	1.331
L5.FTA				0.100	-0.250***	0.350***	-0.077	-0.399***	0.322***
				0.894	-2.853	3.288	-0.656	-4.466	2.860
L10.FTA							0.237	-0.050	0.287**
							1.601	-0.447	2.024
CU	0.914***	0.250***	0.663***	0.673***	0.318***	0.355**	0.598***	0.342***	0.256*
	7.828	2.608	5.972	4.398	2.645	2.428	3.974	2.986	1.774
L5.CU				0.234	-0.257**	0.492***	0.043	-0.442***	0.485***
				1.409	-1.967	3.098	0.241	-3.286	2.859
L10.CU							0.101	-0.088	0.190
							0.564	-0.645	1.100
Number of observations	45303	45304	45303	33624	33624	33624	25463	25463	25463
R2	0.692256	0.487202	0.465837	0.707873	0.567603	0.517898	0.677671	0.628293	0.568739

Notes: ***, **, * indicate significance at 1, 5 and 10 per cent, respectively. T-statistics are provided below every coefficient.

Table 2. Main results for specification 1, Sectors 1, 2 and 3

	Primary goods and agricultural manufactures			Industrial manufactures			Mineral fuels, lubricants and related materials		
	Trade(1)	EM(2)	IM(3)	Trade(4)	EM(5)	IM(6)	Trade(7)	EM(8)	IM (9)
NRPTA	0.141	0.008	0.133	-0.197**	0.090	-0.288***	1.580***	0.626***	0.954***
	1.356	0.098	1.395	-1.964	1.063	-2.826	4.393	2.905	3.205
PTA	0.361***	0.189***	0.173**	-0.245***	0.012	-0.256***	0.140	0.131	0.010
	4.462	3.041	2.342	-3.239	0.182	-3.337	0.515	0.801	0.042
FTA	0.540***	0.155**	0.386***	0.208**	0.135*	0.074	0.561*	0.361**	0.200
	5.797	2.166	4.542	2.340	1.785	0.814	1.944	2.088	0.837
CU	1.193***	0.455***	0.738***	0.598***	-0.025	0.622***	1.429***	0.873***	0.556*
	9.828	4.885	6.668	5.177	-0.254	5.306	4.122	4.204	1.937
Number of observations	38380	38382	38380	38230	38232	38230	10040	10041	10040
R ²	.6749994	.476934	.3910931	.7552722	.5583897	.5406884	.6344305	.5279478	.5566342

Notes: ***, **, * indicate significance at 1, 5 and 10 per cent, respectively. T-statistics are provided below every coefficient.

Table 3. Main results for specification 2, Sectors 1, 2 and 3

	Primary goods and agricultural manufactures			Industrial manufactures			Mineral fuels, lubricants and related materials		
	Trade(1)	EM (2)	IM(3)	Trade(4)	EM(5)	IM(6)	Trade(7)	EM(8)	IM(9)
NRPTA	0.123	-0.238***	0.361***	-0.235**	-0.129	-0.106	1.974***	0.405	1.569***
	1.044	-2.951	3.417	-2.119	-1.442	-0.947	2.789	0.921	2.845
L5.NRPTA	-0.177	-0.046	-0.131	0.071	-0.005	0.075	-1.015	-0.296	-0.719
	-1.330	-0.507	-1.092	0.556	-0.045	0.585	-1.389	-0.652	-1.263
L10.NRPTA	-0.243	-0.033	-0.210	0.045	0.009	0.036	-0.561	-0.085	-0.475
	-1.382	-0.270	-1.331	0.257	0.065	0.203	-0.763	-0.187	-0.831
PTA	0.162	-0.218***	0.380***	-0.332***	-0.198**	-0.135	-0.566	-0.403	-0.163
	1.320	-2.584	3.444	-3.199	-2.364	-1.280	-0.800	-0.916	-0.296
L5.PTA	-0.165	-0.174**	0.008	0.047	0.079	-0.032	-0.023	-0.067	0.045
	-1.319	-2.012	0.072	0.432	0.908	-0.296	-0.035	-0.170	0.090
L10.PTA	0.402***	0.232***	0.169*	-0.096	0.061	-0.157	0.184	0.966***	-0.782**
	3.608	3.036	1.693	-0.985	0.775	-1.590	0.369	3.113	-2.010
FTA	0.332***	-0.134*	0.466***	0.154	-0.024	0.178*	0.510	-0.368	0.878*
	2.911	-1.710	4.545	1.509	-0.296	1.727	0.786	-0.912	1.737
L5.FTA	-0.245*	-0.269***	0.024	0.086	-0.248***	0.334***	0.467	0.297	0.170
	-1.874	-2.992	0.203	0.726	-2.608	2.792	0.746	0.764	0.348
L10.FTA	0.397**	0.074	0.323**	-0.031	-0.061	0.030	0.713	1.317***	-0.604
	2.500	0.677	2.264	-0.214	-0.527	0.207	1.242	3.689	-1.349
CU	0.808***	0.267**	0.542***	0.381**	0.189	0.192	0.590	0.448	0.141
	4.656	2.235	3.470	2.540	1.566	1.264	0.703	0.859	0.216
L5.CU	-0.000	-0.238*	0.238	0.050	-0.336**	0.386**	0.082	-0.092	0.175
	-0.001	-1.755	1.341	0.286	-2.414	2.203	0.101	-0.182	0.274
L10.CU	0.294	-0.045	0.339*	0.083	-0.123	0.206	0.017	0.342	-0.325
	1.519	-0.334	1.945	0.475	-0.877	1.167	0.024	0.771	-0.585
Number of observations	20599	20599	20599	20582	20582	20582	3787	3787	3787
R2	.6517606	.5742395	.4437524	.7308392	.6944148	.6500223	.6794639	.6250954	.6001291

Notes: ***, **, * indicate significance at 1, 5 and 10 per cent, respectively. T-statistics are provided below every coefficient.

Table 4. Main results for specification 3, Sectors 1, 2 and 3

	Primary goods and agricultural manufactures			Industrial manufactures			Mineral fuels, lubricants and related materials		
	Trade(1)	EM(2)	IM(3)	Trade(4)	EM(5)	IM(6)	Trade(7)	EM(8)	IM(9)
DIFNRPTA	-0.004	-0.139	0.135	-0.102	0.137	-0.240*	0.423	0.636	-0.213
	-0.028	-1.458	1.130	-0.794	1.225	-1.761	0.552	1.301	-0.334
DIFNRPTALONG	-0.238*	0.045	-0.283**	0.021	0.046	-0.025	-0.513	-0.196	-0.317
	-1.694	0.431	-2.153	0.150	0.382	-0.171	-0.741	-0.444	-0.553
DIFPTA	-0.094	-0.137	0.042	-0.162	0.043	-0.205*	-1.517**	-0.566	-0.951*
	-0.738	-1.436	0.355	-1.415	0.433	-1.698	-2.191	-1.283	-1.657
DIFPTALONG	-0.172	-0.119	-0.053	0.173	0.216**	-0.043	-0.417	-0.667*	0.250
	-1.405	-1.302	-0.465	1.546	2.224	-0.363	-0.726	-1.822	0.524
DIFFTA	-0.013	-0.097	0.084	0.053	-0.035	0.088	-0.773	-0.277	-0.495
	-0.104	-1.040	0.716	0.450	-0.337	0.703	-1.145	-0.645	-0.885
DIFFTALONG	-0.282**	-0.079	-0.203	0.111	-0.025	0.136	0.246	-0.294	0.539
	-1.982	-0.744	-1.525	0.828	-0.219	0.965	0.412	-0.771	1.089
DIFFCU	0.011	-0.337**	0.349*	0.199	0.139	0.059	0.047	0.213	-0.165
	0.056	-2.237	1.840	1.085	0.877	0.307	0.053	0.372	-0.222
DIFCULONG	-0.060	-0.180	0.120	0.074	-0.137	0.211	0.214	-0.293	0.507
	-0.314	-1.259	0.667	0.415	-0.890	1.126	0.288	-0.618	0.823
Number of observations	20599	20599	20599	20582	20582	20582	3787	3787	3787
R ²	.4280297	.4269036	.3861656	.4721508	.564782	.5102162	.5858345	.577647	.516223

Notes: ***, **, * indicate significance at 1, 5 and 10 per cent, respectively. T-statistics are provided below every coefficient.

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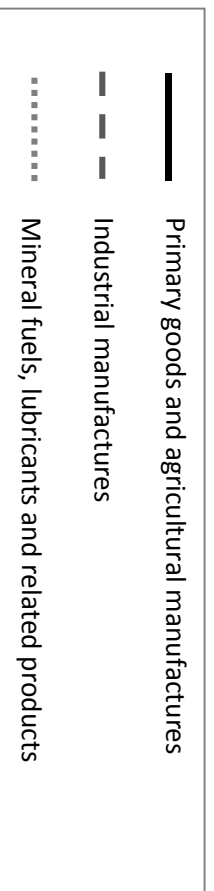
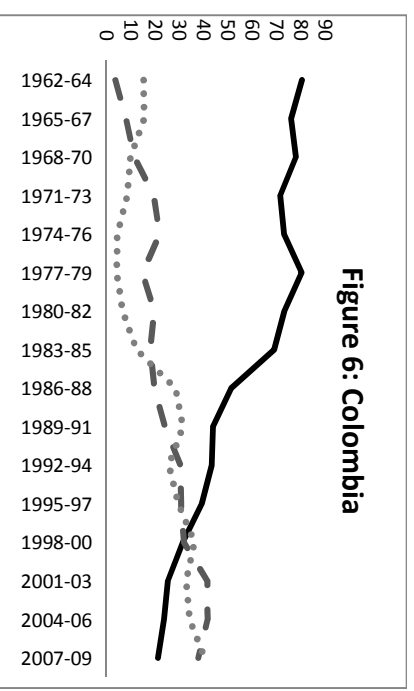
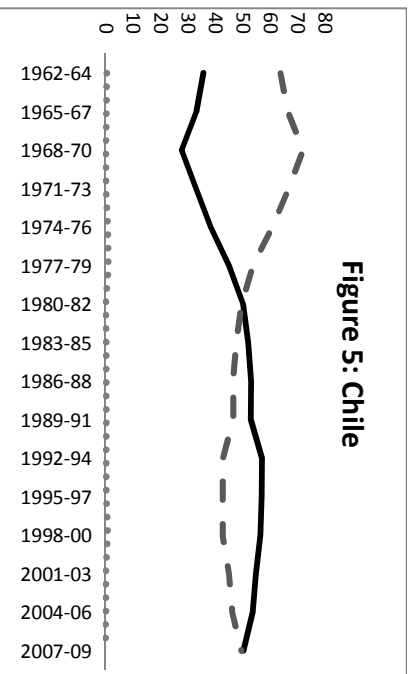
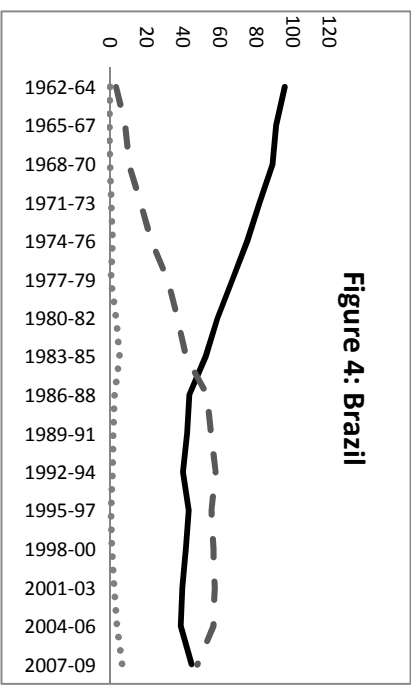
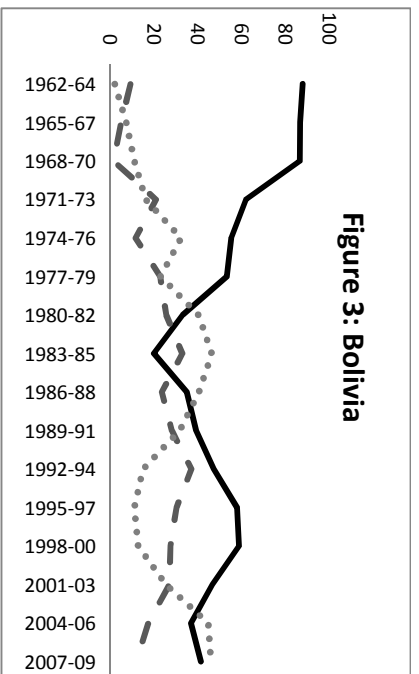
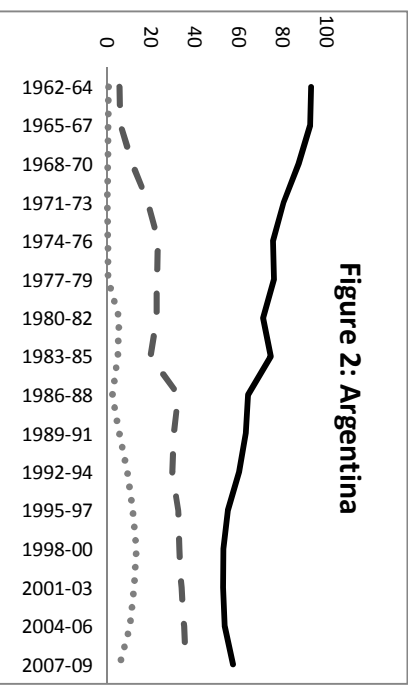
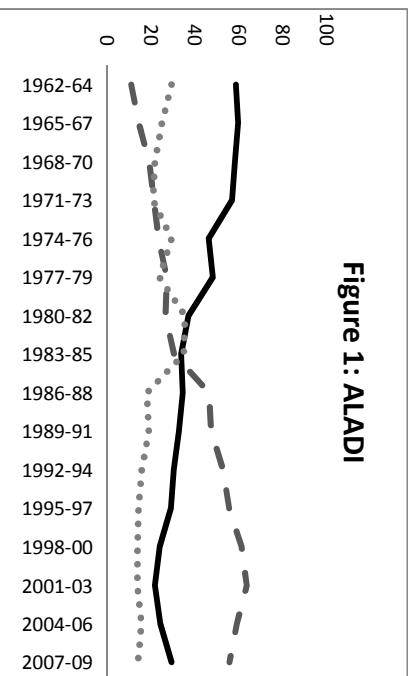
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Appendix

Export Share by Sector



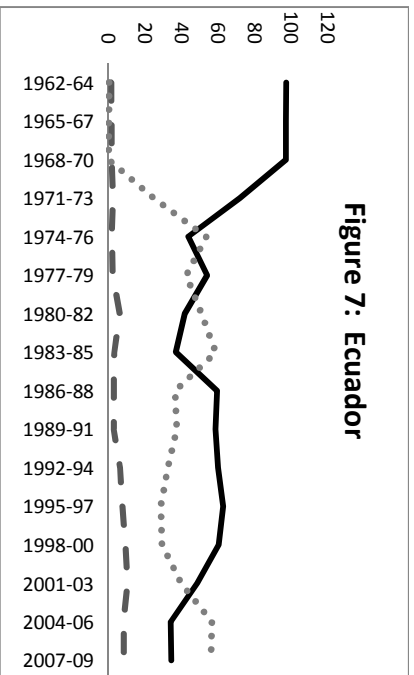


Figure 7 : Ecuador

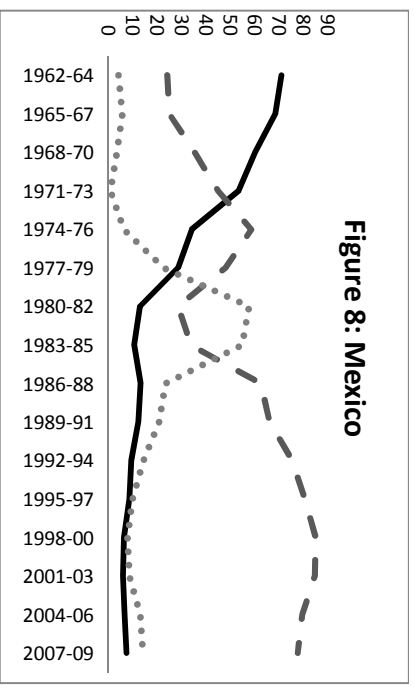


Figure 8 : Mexico

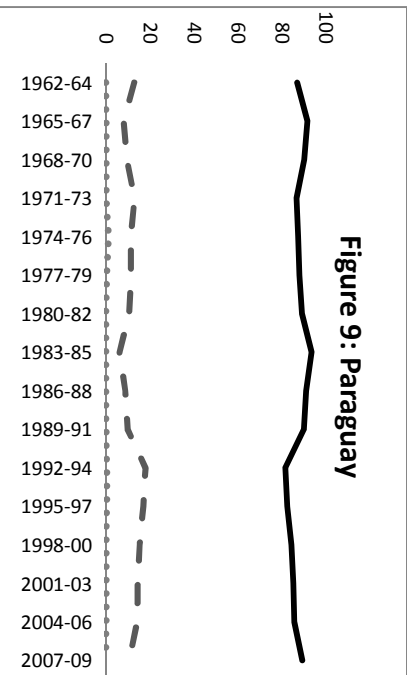


Figure 9 : Paraguay

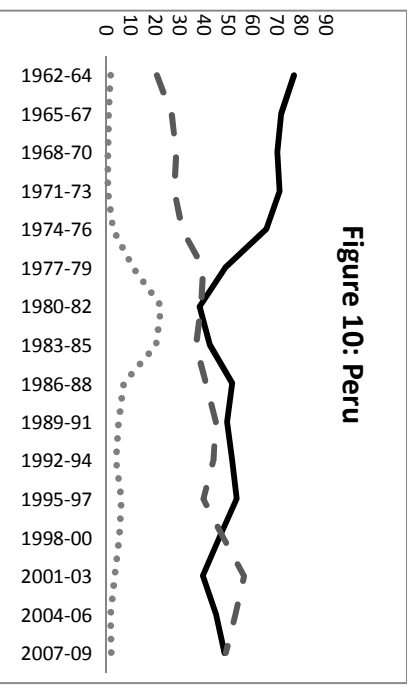


Figure 10 : Peru

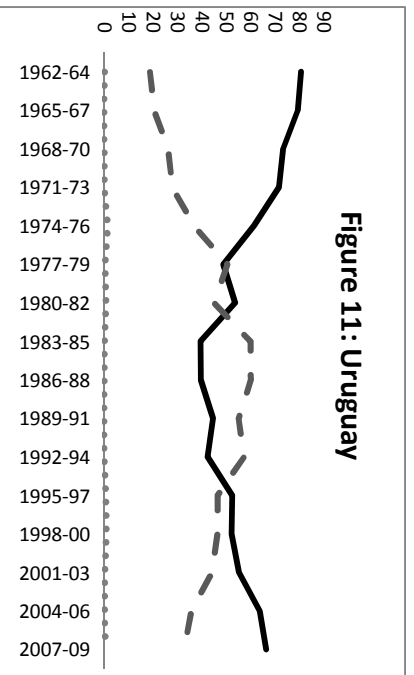


Figure 11 : Uruguay

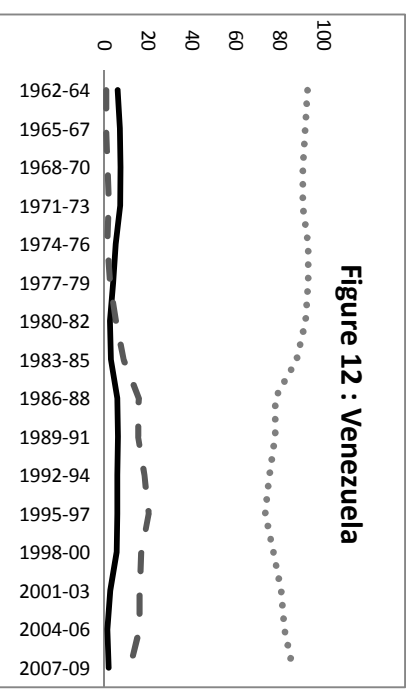
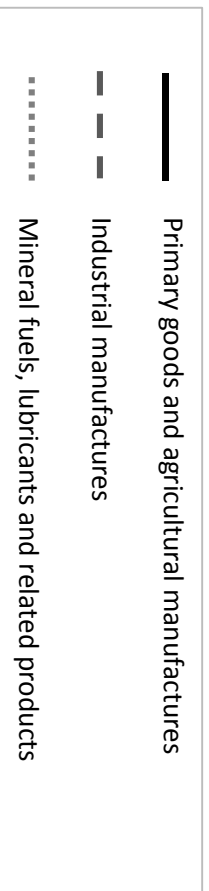


Figure 12 : Venezuela



Export Structure by Destination

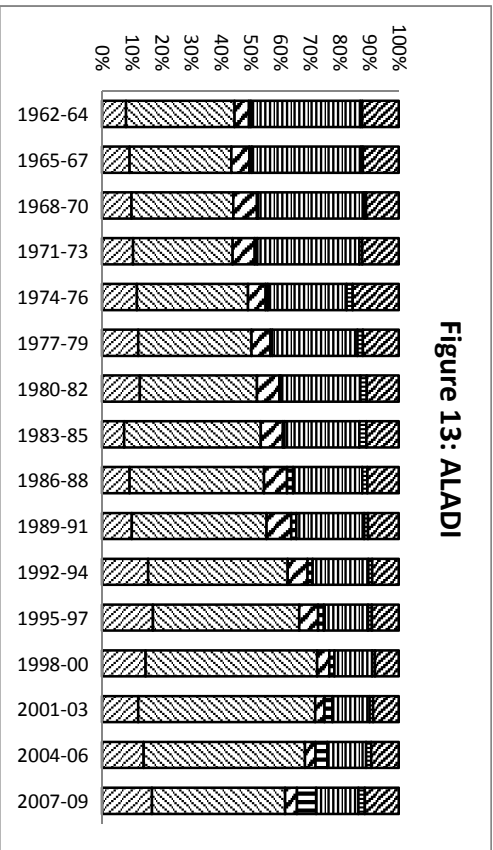


Figure 13: ALADI

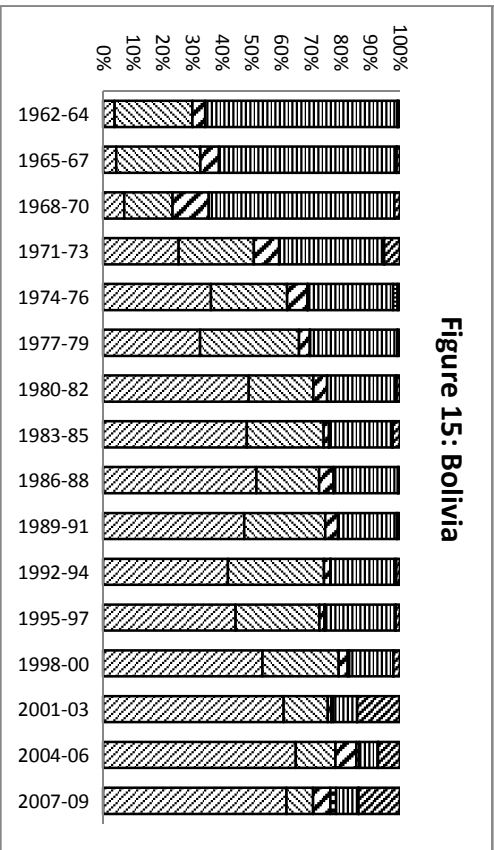


Figure 15: Bolivia

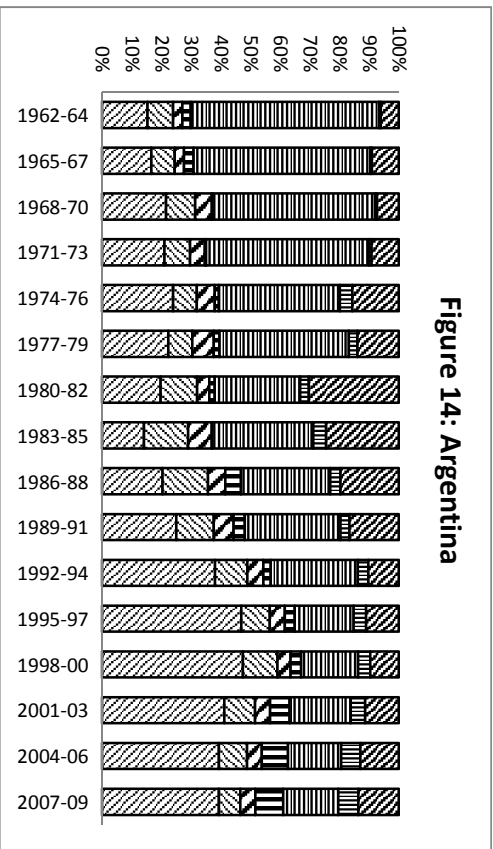


Figure 14: Argentina

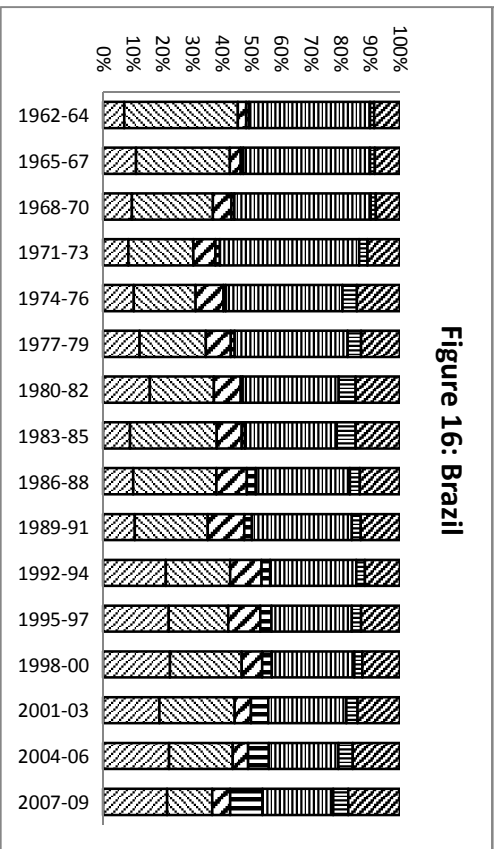
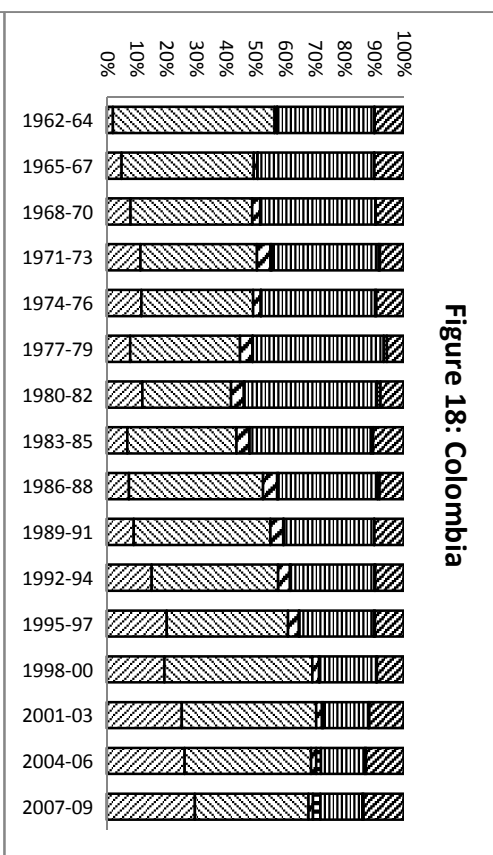
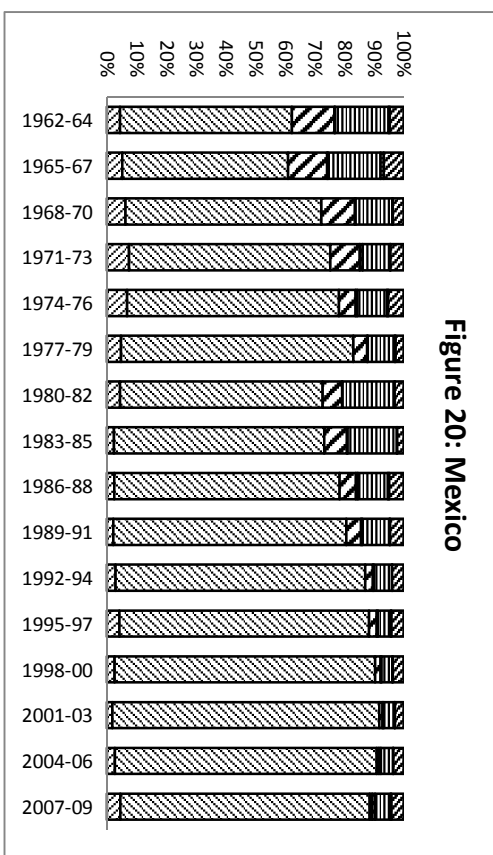
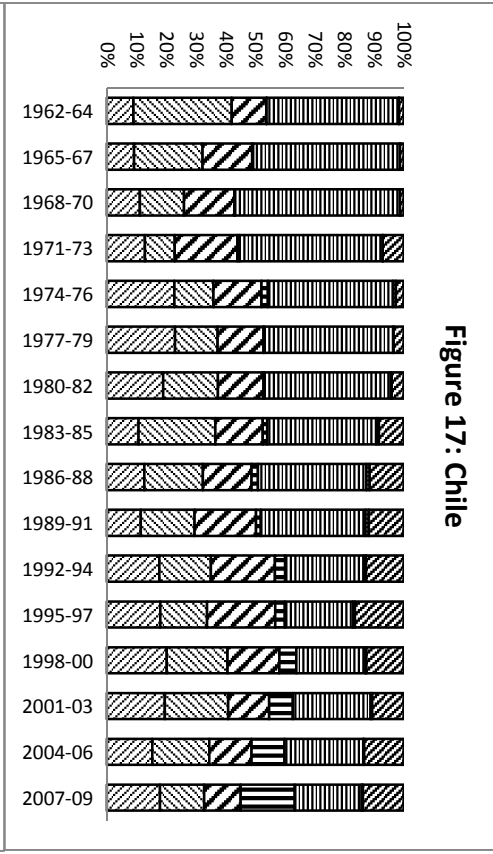
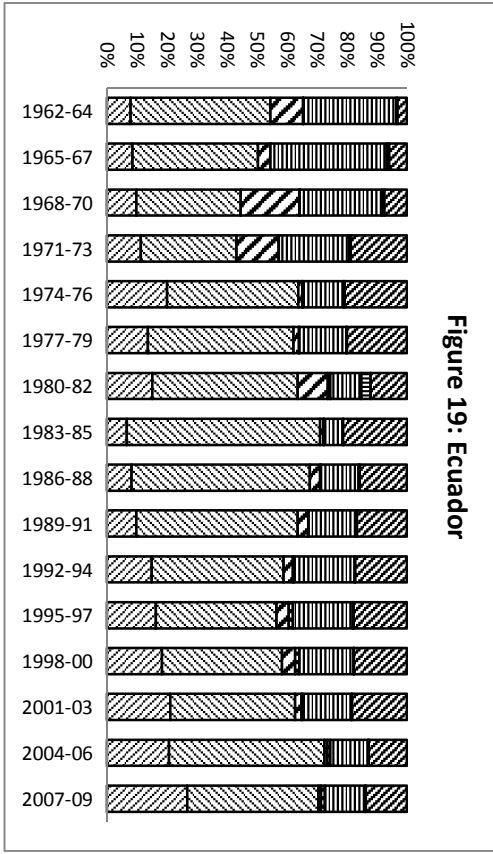


Figure 16: Brazil

- ▨ LATA
- ▩ USA + Canada
- ▧ ASEAN + Japan
- ▦ China
- ▥ EU15
- ▤ Africa
- ▣ Rest of the World



- ▨ LAIA
- ▨ USA + Canada
- ▨ ASEAN + Japan
- ▨ China
- ▨ EU15
- ▨ Africa
- ▨ Rest of the World

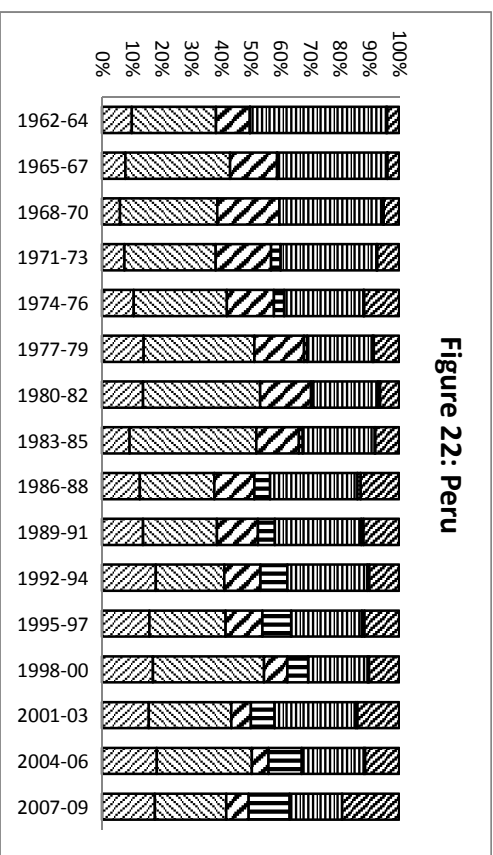
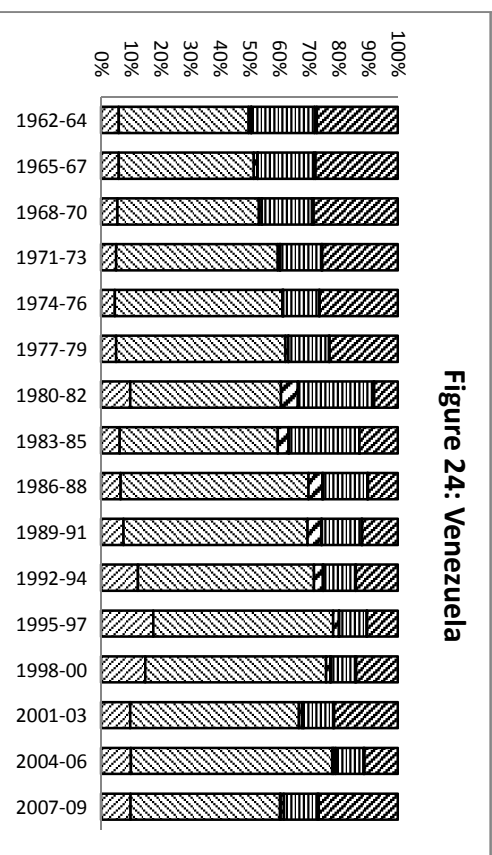
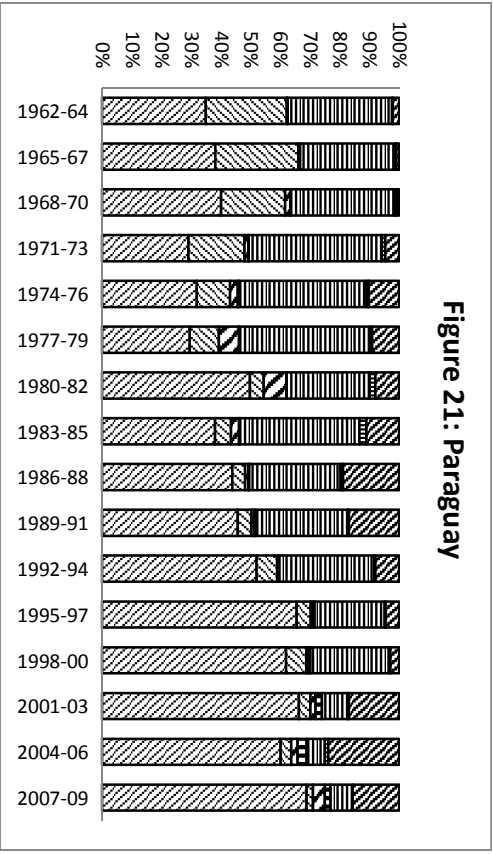
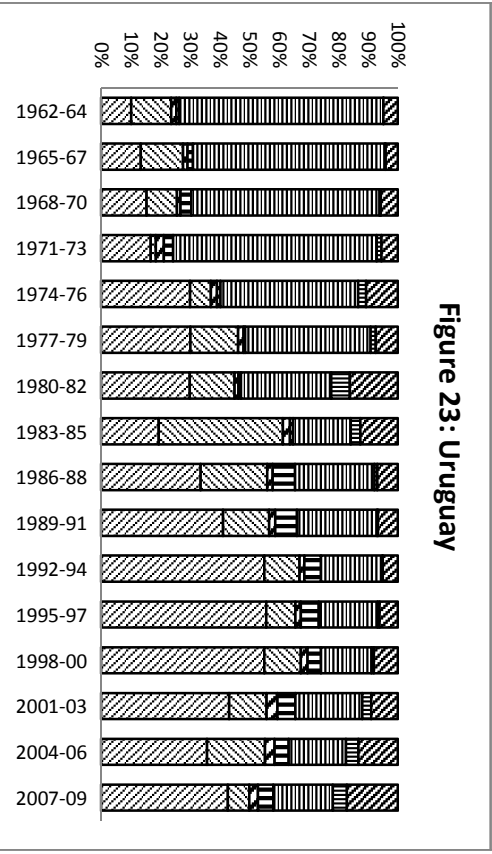


Table A.1: Trade Agreements of LAIA Members and with other EIAs in 2009.

Name	Member Countries	Type of Agreement (BBF)^a	Date of Entry into Force
Andean Community (CAN)	Bolivia, Colombia, Ecuador, Peru and Venezuela	CU	1995
CARICOM-Colombia	Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago - COLOMBIA	PTA	1995
CARICOM-Venezuela	Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago – VENEZUELA	PTA	1993
Central America – Chile	Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua -CHILE	FTA	2002
Cuba- LAIA (Cuba incorporation to LAIA)	Argentina, Bolivia, Brazil, Colombia, Chile, Ecuador, Mexico, Peru, Paraguay, Uruguay and Venezuela – CUBA	PTA	1999
European Free Trade Association (EFTA) - Chile	Norway, Iceland Switzerland, Liechtenstein – CHILE	FTA	2004
EFTA - Mexico	Norway, Iceland Switzerland Liechtenstein – MEXICO	FTA	2001
EU – Chile		FTA	2003
EU - Mexico		FTA	2000
Latin American Integration Association (LAIA)	Argentina, Bolivia, Brazil, Colombia, Chile, Ecuador, Mexico, Peru, Paraguay, Uruguay and Venezuela	PTA	1981
MERCOSUR – Chile	Argentina, Brazil, Uruguay and Paraguay – CHILE	FTA	1996

MERCOSUR- CAN	Argentina, Bolivia, Brazil, Colombia, Ecuador, Paraguay – Peru Uruguay and Venezuela	FTA	2005
North American Free Trade Agreement (NAFTA)	Canada, Mexico and USA	FTA	1994
Northern Triangle – Mexico	El Salvador, Guatemala and Honduras – MEXICO	FTA	2001
Southern Common Market (MERCOSUR)	Argentina, Brazil, Paraguay and Uruguay	CU	1991
Trans-Pacific Strategic Economic Partnership (TPP)	Brunei, New Zealand and Singapore – CHILE	FTA	2007

Source: authors' elaboration using "Regional Trade Agreements" database from WTO and www.nd.edu/jbergstr/.

a. PTA: preferential trade agreement; FTA: free trade agreement and CU: customs unions.

Table A.2: Bilateral Trade Agreements of LAIA Members with Third Countries in 2009.

Name	Type of Agreement (BBF)^a	Date of Entry into Force
Bolivia – Chile	FTA	1993
Bolivia – Mexico	FTA	1995
Canada - Chile	FTA	1997
Chile – China	FTA	2007
Chile – Colombia	FTA	2009
Chile - Costa Rica	FTA	2002
Chile - El Salvador	FTA	2002
Chile – Honduras	FTA	2008
Chile – India	PTA	2008
Chile – Japan	FTA	2008
Chile - Mexico	FTA	1999
Chile – Panama	FTA	2009
Chile - Republic Korea	FTA	2004
Chile - Peru	FTA	1998
Chile – Venezuela	FTA	1993
Chile - US	FTA	2004
Colombia - Mexico	FTA	1995
Costa Rica - Mexico	FTA	1995
Guatemala – Venezuela	PTA	1987
Israel - Mexico	FTA	2000
Japan - Mexico	PTA	2005
Mexico - Nicaragua	FTA	1998
Peru – USA	FTA	2009

Source: authors' elaboration using "Regional Trade Agreements" database from WTO and www.nd.edu/jbergstr/.

a. PTA: preferential trade agreement and FTA: free trade agreement.

Table A.3: Generalized System of Preferences in 2009.

Provider Country	LAIA Beneficiary Countries	Initial Entry into Force
Australia	All LAIA countries	1974
Belarus	Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Uruguay	2004
Canada	All LAIA countries	1974
European Union	Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, Peru, Paraguay, Uruguay and Venezuela	1971
Iceland	Argentina, Brazil, Paraguay and Uruguay	2000
Japan	All LAIA countries	1971
Liechtenstein	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Uruguay and Venezuela	1972
New Zealand	All LAIA countries	1972
Norway	All LAIA countries	1971
Russia	All LAIA countries	1994
Switzerland	Argentina, Bolivia, Brazil, Ecuador, Paraguay, Uruguay and Venezuela	1972
Turkey	All LAIA countries	2002
US	Argentina, Brazil, Colombia, Ecuador, Paraguay, Uruguay and Venezuela	1976

Source: authors' elaboration using "Regional Trade Agreements" database from WTO and www.nd.edu/jbergstr/.