

WORKING PAPER / 2008.01



Far from Champions, close to Midgets – International Production Sharing in Central and South America

Germán Calfat, Danny Cassimon, Renato G. Flôres Jr. and Ana Rivas



University
of Antwerp



INSTITUTE OF DEVELOPMENT
POLICY AND MANAGEMENT

Working Papers are published under the responsibility of the IOB Thematic Groups, without external review process. This paper has been vetted by Danny Cassimon, convenor of the Thematic Group Impact of Globalisation.

Comments on this Working Paper are invited. Please contact the author at <name.surname@ua.ac.be>.

Institute of Development Policy and Management
University of Antwerp

Postal address:	Visiting address:
Prinsstraat 13	Lange Sint Annastraat 7
B-2000 Antwerpen	B-2000 Antwerpen
Belgium	Belgium

tel: +32 (0)3 265 57 70
fax +32 (0)3 265 57 71
e-mail: dev@ua.ac.be
www.ua.ac.be/dev

Far from Champions, close to Midgets – International Production Sharing in Central and South America ¹

Germán Calfat, Danny Cassimon, Renato G. Flôres Jr. and Ana Rivas

preliminary version: November, 2007

TABLE OF CONTENTS

Table of Contents	4
Abstract	5
Introduction	6
2. Measuring Fragmentation	9
3. A glance at the four Latin American economies	12
4. Evidence of fragmentation.	15
5. Conclusions: perspectives and policy remarks.	27
References	28
Annex I: The Lemoine & Unal-Kesenci classification adopted	30
Annex II: Selected tables (Tables 3 to 24)	31

ABSTRACT

This paper assesses the relative participation of Argentina, Brazil, Guatemala and Nicaragua in fragmented world production. Based on trade statistics from 2000 to 2004, it analyses whether the trade flows of these economies have evolved towards production sharing schemes, and how great this type of trade is, in order to sustain their presence in the world economy. Guatemala and Nicaragua have reached a moderate insertion in a production sharing scheme, following a North-South trade pattern. Nonetheless, their participation is still small, being threatened not only by international competition, but also by their dependence on a unique market. Brazil has consolidated participation in a few chains, showing a more diversified North-South trade pattern. Argentina has attained insertion in the automotive chain of production, whereas its participation in other ones seems still quite limited. The country has a more South-South trade pattern, which exposes it to a certain degree of dependence.

Keywords: Sharing production, Fragmentation, Trade in part and components, Outsourcing

JEL classification: F10, F23, L23

INTRODUCTION

A productive structure in which manufacturing or services activities developed at home are combined with those performed abroad, usually in more than one place, has been broadly named “International Fragmentation”. An example can be provided by the textile and apparel industries in advanced countries which have shifted their unskilled labour processes towards developing countries, keeping design and distribution at headquarters. Further examples can be found in high-technology sectors such as electronics, pharmaceuticals and automobiles.

Nonetheless, there is not a standard denomination in the literature for this phenomenon. Sanyal & Jones (1982) have called as *middle products* the pair of inputs entailed for the production of final goods - those available in the national markets and those obtained abroad. Yeats (2001) and Kimura & Ando (2005) used *production sharing* to refer to the internationalization of a manufacturing process in which several countries participate at different stages of the manufacturing process of a specific good. Likewise, terms such as super-specialization, vertical integration and outsourcing constitute another examples by which it has been denominated in the literature (see Arndt (1998); Hummels, Ishii, & Yi (2001); Feenstra, Hanson, & Swenson D. L (1998)).

The expansion of international fragmentation of production along with globalisation has gained substantial attention since the last decade. It has led to a body of research aimed at finding the causes, content and effects of production fragmentation. By investigating the forces that might have underpinned its expansion, Athukorala & Yamashita (2006) pointed out that the advances in production technology, innovations in transports and communications and the liberalisation and trade reforms undertaken by many countries can be considered as the three main facts which have lowered service-linked costs and created new opportunities for extending product fragmentation across national frontiers.

Likewise, a number of researchers have studied several aspects involved in the process. Jones & Kierzkowski (2005) took into account the geographical dimension. They emphasised the role of transport costs and service linkages and their contribution to international outsourcing, as compared to production within the borders of a single economy. Van Long et al. (2005) explored the role that services might play in limiting fragmentation. In their study, they pointed out that to produce components (fragmentation) and connect them with other production blocs, an economy needs both manufacturing labour and services. As the number of services an economy can offer depends on its size and stage of development, it can be argued that the greater the range of services an economy has, the more efficient is its production of components. Nonetheless, in a country with a greater range of services they may be more expensive, perhaps due to higher labour cost. Therefore, the trade off between scope in the supply of services and their individual cost determines what types of components will be produced in which country. Grossman & Helpman. (2002) explored outsourcing decisions in a global economy framework. According to their model, such decisions are linked to three main features of the modern outsourcing strategy: (a) searching for partners, (b) convincing potential suppliers to customize products in accordance with the needs and (c) relationship-specific

investment, governed by incomplete contracts. Thus, the extent of international outsourcing will depend on the thickness of the domestic and foreign market for input suppliers, the relative cost of searching in each market, the relative cost of customizing inputs and the nature of the contracting environment in each country.

Several studies have emphasised that the phenomenon raises implications which are relevant from a policy point of view. The existence of differences in factor prices across national borders is one of the main forces on a firm's outsourcing decision (see, for instance, Feenstra (1998)). Thus, as firms in developed countries tend to shift their unskilled-labour stages of production towards unskilled-labour abundant developing countries, fragmentation may drive changes in the pattern of trade, by enhancing integration of developing countries into the world economy. A number of works have addressed the effects that fragmentation might have on the wages of unskilled workers in developed countries. Feenstra (1998a, b) has pointed out that domestic employment is affected when firms decide to source their production overseas. Moreover, it will impact differentially the wages of unskilled and skilled workers. As unskilled labour in a developed country is relatively more expensive than abroad, the outsourced activities will be those that use a large amount of unskilled labour and, consequently, this will shift down the demand of unskilled relative to skilled labour within an industry. Yet, trade (through international fragmentation) and technology are complementary rather than competing explanations for the change in employment and wages. Yomogida (2006) studied the effect of fragmentation on welfare for the case of developed countries. He argued that though a firm might benefit when it decides to move its production overseas, the firm's private decision not necessarily benefits the economy as a whole.

In a sense, all these implications underline the key role that sharing production has for the development of those economies not yet participating in it. Actually, to get involved in any world fragmented chain of production represents a great challenge for any country and even more for those small developing economies whose opportunities are more limited. The lack of insertion in sharing production processes reduces their growth and industrialization opportunities, whilst their inclusion will provide more sustainable growth paths. Measuring the relative importance that sharing production has for any developing country constitutes a relevant issue, since it will provide some useful insights for policy design.

This study assesses the importance of shared world production for four Latin American economies: Brazil, Argentina, Guatemala and Nicaragua, using trade data from 2000 to 2004. All experienced trade liberalisation reforms and engaged in different regional trade agreements during the last few decades. Nevertheless, each has developed different trade structures. Size and specialisation also varies considerably among them. Assessing their insertion into international production sharing schemes leads us to inquire how and to which extent are they actually involved in sharing production? Other relevant questions are: How great is their participation in international production-sharing activities? Do parts and components hold representative shares on exports and imports as well?

The paper is structured as follows. Section 2 provides an overview of the empirical studies aimed at measuring fragmentation, followed by a short description of the methodology we use, based on Yeats (2001). Section 3 gives a brief background of each Latin American

economy. The core of the paper is Section 4, which discusses the empirical evidences and provides some initial perspectives and policy remarks. Section 5 concludes, taking into account the perspectives for those economies remaining outside international fragmentation.

2. MEASURING FRAGMENTATION

Empirical literature focusing on measuring fragmentation is still quite limited. Most of the available studies based their analysis on trade in intermediate inputs. Feenstra (1998) investigated fragmentation developments with special attention to the US. He used three methods to measure the relative importance of fragmentation. The first one refers to a reclassification of the trade data using the “end-use” categories of the Broad Economic Activities (BEA). As these categories assign goods according to their use by purchase rather than by their production process, this reclassification enables to identify which categories the pull of trade is concentrated in, as well as to analyse their evolution through time. A second method is through imports of intermediate inputs within each industry. Input purchases data can be used to estimate imported intermediate inputs by industry². These estimated values can then be expressed relative to total intermediate inputs purchases. The third one is the vertical specialization index proposed by Hummels et al. (1997), which is equal to the fraction of the total trade accounted by inputs that are both imported and then embodied in exports. By using all these measures, the author found that OECD countries had witnessed an increasing use of imported inputs as well as a reduction of domestic production activities.

Jones et al. (2005) added empirical evidence on the rapid expansion of international trade in parts and components. They stressed that fragmentation does not depend on a particular market structure, since its expansion occurs within a perfect competition structure as well as a monopolistic one. The optimal degree of fragmentation depends on the size of the market and lowering service-linked costs promotes fragmentation. Under these considerations, they estimated an equation in which trade in parts and components of a specific region is explained by the size of the market, measured by the GDP, and services costs. The latter are measured by the average of business telephone charges. Their results depict indeed that international outsourcing has become a key feature of globalisation, with the increase of trade in parts and components having surpassed the expansion of intra-industry trade.

In the context of the Asian economies, Lemoine & Unal-Kesenci (2004) analysed developments in assembly trade of China by reclassifying China’s trade data by stage of production. As a country’s exports may have high/low imports content, they analysed comparative advantages by considering the sectoral trade balances, as measured by the Contribution Trade Balance index by Lafay (1994). The authors found that China’s international trade is enormously linked to world fragmented production processes. China’s specialization in assembly trade has enhanced the growth of its competitive manufacturing sector, which constituted the main channel for technology transfers.

Kimura & Ando (2005) used finer disaggregated trade data and micro-data of Japanese firms to investigate the international production/distribution networks in East-Asia. Their study focuses on three main aspects: (a) the relative importance that trade in machinery

² It can be computed by multiplying the purchases of each type of input and its respective share in the economy. The obtained values are then aggregated by each industry.

goods and parts and components has; (b) the characteristics of the Japanese firms and (c) the corporate firm's behavior from the viewpoint of firms affiliated abroad. The latter is analysed by computing the share sales/purchases of a number of Japanese affiliates in East Asia. Their results reveal that geographic distance and uncontrollability are the two axes of fragmentation in East Asia. Moreover, in both axes, service linkages seem to be the key in the development of production networks.

Based on the decomposition-type threshold method by Fontagné and Freudenberg (1997), Ando (2006) examined developments in the East Asian trade structure. This method - which is an extension of an earlier threshold method by Ab-el-Rahman (1991) - splits total trade up into three categories, namely, one-way, vertical intra-industry and horizontal intra-industry trade. The author found that the relative importance of vertical intra-industry trade has greatly increased, whilst that of one-way trade has drastically shrank reflecting the fact that production sharing has become an essential feature of the East Asian economies. Following Yeats (2001) and Athukorala (2003), Athukorala & Yamashita (2006) also analysed the nature, trends and patterns on fragmentation trade with special attention to East Asian economies. Their study comprises more recent and detailed UN trade data. Apart from evidencing a substantial expansion of fragmentation, they found that the degree of dependence on sharing production is proportionately larger in East Asia than in North America and Europe.

The above studies addressed mainly developed countries or East-Asian developing countries, giving little attention to Latin American economies³. This might be explained by the fact that most statistical systems fail in compiling trade under a value-chain perspective. In fact, measuring fragmentation entails finer trade data, and a number of the empirical studies previously mentioned have used not only standard international trade statistics but complementary trade data not generally available for developing countries. Görg (2000) used data from the Outward Processing Trade in EU and Feenstra et al. (1998) used the US Offshore Assembly Program data to capture trade under custom arrangements in which complete/partial tariff exception or levy reductions are granted in accordance to the domestic input content of imported goods. Yeats (2001) used both international trade statistics - SITC 7 revision 3 - and the Offshore Assembly Processing (OAP) data to assess the magnitude and nature of global production sharing.

In spite of the limitations imposed by the lack of complementary trade statistics, we succeeded in assessing fragmentation for four Latin American economies. To accomplish this, we followed Yeats (2001)'s methodology, which can be applied to the available trade data. With the help of OAP data, he compared trade in parts and components with that in final products, in order to assess the magnitude of global production sharing. In the absence of OAP-like information, we focused not only on parts and components comprised under the SITC-7 rev.3 group, but extended our analysis to those SITC product groups that, without being classified as parts and components, are classified as semi-finished products used as inputs in fragmented production of manufactures. Using a revised version of the Broad Economic Categories (BEC), we reclassified SITC products into categories corresponding to

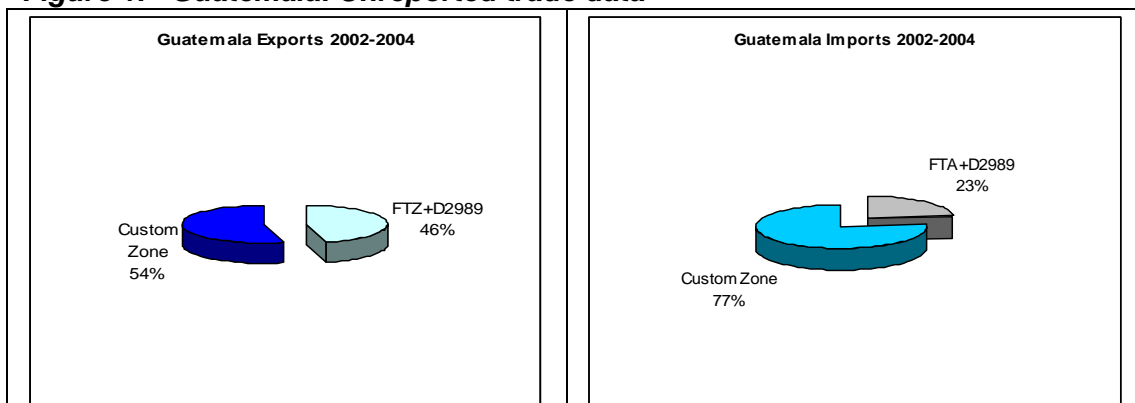
³ Fontagné et al. (1999) addressed fragmentation in the automotive and electronics sectors in Asia and Latin America

their intermediate or final use. Moreover, in order to identify the stage of production that any SITC products is related with, we also classified them by stage of production, following the classification proposed by Lemoine & Unal-Kesenci (2004)⁴. Three stages of production were considered: (a) primary goods (I); (b) intermediate goods, split up into two categories: semi-finished products (II) and parts and components (III); (c) final goods which also split into two categories: capital goods (IV) and consumption goods (V).

We used COMTRADE statistics from 2000 to 2004, available up to the five-digits of the SITC rev.3 classification. Nevertheless, for Guatemala and Nicaragua, trade statistics from special trade regimes were unreported. These unreported data are related to assembling trade, which is relevant for the purposes of this paper. Thus, additional trade statistics disaggregated by trade regimes were gathered for the case of Guatemala. These were provided by the Bank of Guatemala (BANGUAT) but only for the 2002-2004 period⁵. Further comparison between both datasets showed that only “customs zone” trade was reported by COMTRADE whilst statistics from the Free Trade Zone (FTA) and the Decree 2989 (D2989) regimes were unreported. Moreover, the percentage of unreported data was relatively significant. As Figure 1 shows, “normal exports” held only 54% of total Guatemalan exports during 2002-2004, while exports by FTA and D2989 regimes held 46% of total exports during the same period.

It is worth mentioning that statistics from the Bank of Guatemala were only available at the eight-digits of the Central American system nomenclature (SAC). This classification is based on the Harmonized nomenclature of 2002 (HS02); more specifically, the first six-digits of the SAC classification correspond exactly to the HS02 codes. The BANGUAT dataset has then been reclassified by SITC rev.3 nomenclature codes, using a correspondence table between HS02 and SITC rev.3 classifications.

Figure 1: Guatemala: Unreported trade data



Data source: Authors' estimations based on COMTRADE and the Bank of Guatemala databases

⁴ See Annex 1 for more details on the classification adopted.

⁵ The Bank of Guatemala began to report trade statistics by each trade regimen since 2002.

For Nicaragua, the analysis is based only on COMTRADE, since we could not gather similar detailed statistics, despite the efforts made⁶.

3. A GLANCE AT THE FOUR LATIN AMERICAN ECONOMIES

Table 1 shows basic data on our four economies. Brazil and Argentina are the biggest members of MERCOSUR. Both started liberalisation programs during the late eighties, initially on a unilateral basis. Subsequently, they decided to intensify their liberalisation reforms through a bilateral agreement. Later on, they decided to create, in 1991, a Common Market, MERCOSUR, to which they invited Paraguay and Uruguay to join.

Brazilian trade reforms have led the country towards more open trade. According to the World Trade Organization, WTO (2004), Brazil – which is characterized by large and well developed agricultural, mining and services sectors - is expanding its presence in world markets. During 2000-2003, it attained the highest degree of openness in its post-war history. The average openness⁷ ratio has risen from 18.1% during 1996-1999 to 27.3% during 2000-2003. The WTO also highlights that Brazil has diversified its trade partnership to regions hitherto with a rather small share in its trade flows. Moreover, the country has continued reinforcing its trade liberalisation policies, both independently and as a MERCOSUR member.

⁶ It was not possible to define the percentage of unreported data for the case of Nicaragua. Up to our knowledge detailed trade statistics by free trade zone regime are recorded since 2002 by the National Commission of Free Zones (CNZF) and by the *Dirección General de Aduanas* (DGA), but only general statistics are available

⁷ Openness is defined as the ratio of export plus imports of goods and services divided by the GDP

Table 1: The four countries: main economic indicators, 2000-2004.

Country Indicator	2000	2001	2002	2003	2004
Argentina					
Population (<i>million</i>)	36896	37274	37642	38005	38372
GDP growth(<i>annual %</i>)	-0.8	-4.4	-10.9	8.8	9.0
GDP (<i>current US \$</i>)	284204	268697	102042	129596	153014
FDI, net inflows (<i>BoP, current US\$</i>)	10418	2166.00	2149.00	1652.00	4084.39
Exports (<i>% of GDP</i>)	10.9	11.5	27.7	25.0	25.3
Imports (<i>% of GDP</i>)	11.5	10.2	12.8	14.2	18.1
Debt service (<i>% of exports of goods, services and income</i>)	70.7	42.1	16.5	37.8	28.5
Brazil					
Population (<i>million</i>)	173858	176377	178895	181408	183913
GDP growth(<i>annual %</i>)	4.4	1.3	1.9	0.5	4.9
GDP (<i>current US \$</i>)	601732	508433	460787	505747	603973
FDI, net inflows (<i>BoP, current US\$</i>)	32779	22457	16590	10144	18166
Exports (<i>% of GDP</i>)	10.66	13.22	15.49	16.38	18.02
Imports (<i>% of GDP</i>)	12.18	14.22	13.41	12.77	13.35
Debt service (<i>% of exports of goods, services and income</i>)	93.64	75.90	69.97	66.36	46.82
Guatemala					
Population (<i>million</i>)	11166	11434	11711	11998	12295
GDP growth(<i>annual %</i>)	3.6	2.3	2.3	2.1	2.7
GDP (<i>current US \$</i>)	19291	20978	23268	24881	27399
FDI, net inflows (<i>BoP, current US\$</i>)	230	456	111	131	155
Exports (<i>% of GDP</i>)	20.20	18.80	17.12	16.72	17.02
Imports (<i>% of GDP</i>)	28.95	28.98	29.48	29.37	31.07
Debt service (<i>% of exports of goods, services and income</i>)	8.40	8.73	7.36	7.19	7.44
Nicaragua					
Population (<i>million</i>)	4959	506	5162	5268	5376
GDP growth(<i>annual %</i>)	4.1	3.0	0.8	2.5	5.1
GDP (<i>current US \$</i>)	3936	4103	4026	4102	4496
FDI, net inflows (<i>BoP, current US\$</i>)	267	150	204	201	250
Exports (<i>% of GDP</i>)	23.89	22.62	22.39	24.54	26.68
Imports (<i>% of GDP</i>)	51.10	48.31	48.69	51.47	54.51
Debt service (<i>% of exports of goods, services and income</i>)	19.72	22.93	9.91	10.65	5.77

Source : World Bank

Brazilian trade policy has focused on strengthening the expansion of trade in industrial goods.⁸ Automobiles, aircrafts and shipbuilding have benefited from specific support programs. Moreover, Brazil has become a world-class manufacturer of selected products, like motor vehicles, aircraft, and certain electronic products and machinery and equipment.

Argentina experienced an economic boom during the nineties, with significant GDP growth rates, control of the inflation rate and broad market reforms, including liberalisation, deregulation and privatization. Nevertheless, by the end of the decade, several external and internal crises drastically affected the country. Recession began to unfold, with GDP experiencing a continuous fall. By the end of 2001, the economic recession turned into a severe financial crisis. To alleviate the impact of the crisis, the government pursued extreme policy measures. All bank deposits were frozen; the country defaulted on external debt and repealed the convertibility of the peso, devaluating the national currency. With a more competitive and flexible exchange rate, new policies based on re-industrialization, the increase of exports, and consistent fiscal and trade surpluses were implemented. By the end

⁸ Brazil's diverse industries range from automobiles, steel and petrochemicals to computers, aircraft, and consumer durables trade.

of 2002, the economy began gradually to recover. GDP grew by a sustainable annual rate of 9% during 2003 and 2004. At the same time, exports and imports also increased significantly.

Guatemala and Nicaragua are former members of the Central American Common Market (CACM). Guatemala is both the largest country and economy of Central America, with a population of 12.29 m and a GDP of US\$ 27.39 bn in 2004. Nicaragua, with a GDP of US\$ 4.49 bn and a population of 5.49 m in 2004, is, after Haiti, the second poorest economy in the region. The two countries underwent years of severe political issues, which ended only during the last decade⁹. Since then, both have undertaken important steps to enhance growth, as well as their insertion into the world economy.

Guatemala's economy is based mainly on agriculture¹⁰; the main economic sector in terms of output, employment and trade. In 2005, it accounted for about 22% of GDP. Manufacturing accounted for 12.4% 2005¹¹, down from 13.2% in 2000, evidencing that even though its value-added in real terms has increased, the relative share of this sector in total GDP has steadily decreased during the current decade. Yet, processed agricultural products for domestic and overseas markets represent the main output of Guatemalan industry. In a minor scale, export-oriented products such as textiles, footwear and chemicals constitute other representative industries within the manufacturing sector.

Growth of the export-oriented industries has been encouraged during the last few years. In fact, Guatemalan trade policy aims at promoting a competitive market, where producers are positioned according to their productivity, as well as strategies to intensify its international insertion. The Assembly Law and the free trade zones regimes are among the key trade measures undertaken by the government. Trade of intermediate goods, machinery and parts and components greatly benefited from them. Information provided by the Ministry of Economy indicates that, in November 2005, there were 554 active firms benefiting from the assembly law and another 185 firms operating in free trade zones. Of these, 324 were engaged in the production of clothes and apparel, and 129 in manufactured products. Other important activities included the production of plastics, pharmaceuticals and chemicals as well as the commercialization of agricultural products.

Nicaragua is also characterized by being an agricultural economy with a small manufacturing base. Around 36% of the land area is devoted to agriculture and livestock, and manufacturing accounts for around 18% of GDP. The WTO highlights in its report on Nicaragua that a large part of the manufacturing sector is composed of industries which produce foodstuff and beverages, mainly made from meat, milk and sugar. Furniture and footwear are also representative within the manufacturing sector. In 2002, they accounted for 413 and 212 firms, respectively. Yet, textiles and wearing apparel constitutes a dynamic growing sector. The enlargement of this sector - which uses low labour skill and technology -

⁹ Guatemala suffered more than 36 years of internal conflicts which formally ended with the signing of the Peace Accord at the end of 1996. On the other hand, Nicaragua endured a Sandinista Regimen for 12 years which ended at the beginning of the nineties with the defeat of the Sandinistas by a coalition of Anti Sandinistas.

¹⁰ It also includes forestry, fishing and hunting activities.

¹¹ Based on statistics from the Bank of Guatemala.

has been enhanced by the free trade zones regime, the preferential treatment (zero duties) granted, in the framework of CAFTA, for some textiles and wearing apparel in the US market and also the comparatively low labour cost the country enjoys in the region. The automotive industry is still rather small, with only 80 of 3467 firms in 2002 producing parts and components for vehicles, with a value-added of 0.6 %.

4. EVIDENCE OF FRAGMENTATION.

We started by inspecting how the trade structure of each country is composed, identifying to which stage of production the main flows are associated. There are two reasons for doing this. First, a country might be part of a production process at a stage which uses more intensively semi-finished goods rather than parts and components. Second, the SITC-7 category includes mostly parts and components for machinery and transport; nevertheless, industries such as chemicals, apparel and textiles, footwear and so forth require also semi-finished products not comprised under it. Table 2 depicts the composition of trade by broad groups of products and stage of production.

As regards *Argentina*, except for 2004, intermediate products constitute by far the foremost category in both exports and imports (70% of total exports and 64% of total imports, in 2003), with semi-finished products being the most representative sub-group. The parts and components share oscillates around 6% of total exports, whilst its relative participation in global imports has decreased. Inside final goods, those for consumption (sub-group V) have fairly increased their relative participation in exports, while within total imports it has greatly decreased. The substantial significance of both intermediate and final goods in the Argentinian trade structure suggests that its manufacturing sector is linked to fragmented chains of production, a point to be further checked.

Intermediates also represent the most important category in the *Brazilian* trade structure. On the export side, their relative importance has slightly decreased (from 61% in 2000 to 58% 2004); on the import side, an increasing participation is noticeable (from 65% in 2000 to 70% in 2004). Although exports in parts and components make around 12% of total exports, semi-finished products remain the most important sub-group within this category. Consumption goods (sub-group V) are the most representative subgroup within exports of final goods. Comparing exports shares in Argentina and Brazil, we observe that capital goods (sub-group IV) hold a relatively greater participation in Brazil, suggesting that the Brazilian manufacturing sector would be more connected to high-tech production chains than Argentina.

Table 2: The four Economies: Trade Pattern by Stage of Production

Country	Stage of Prod ^{a/}		Exports					Imports					
			2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	
Argentina	Primary	I	2,5	2,1	1,8	1,6	1,4	1,4	1,4	2,6	2,1	1,2	
		II	58,6	61,1	62,5	64,6	61,9	34,5	37,5	49,9	46,4	25,0	
	Final Goods	III	6,5	5,8	5,9	5,4	6,1	19,9	18,9	19,3	17,8	11,7	
		IV	7,4	7,3	6,6	4,7	5,4	24,4	20,7	14,0	19,1	53,5	
		V	23,9	22,5	22,1	22,7	24,1	19,0	20,3	13,3	13,6	7,4	
Brazil	Primary	I	5,9	4,8	4,9	4,6	4,5	2,3	2,4	3,1	3,3	3,9	
		II	48,4	47,0	47,7	48,5	46,7	37,9	38,2	37,0	39,4	40,7	
	Final Goods	III	12,5	12,2	11,8	11,6	11,0	26,8	26,8	27,1	28,6	29,6	
		IV	11,8	11,7	11,3	11,4	13,8	18,9	22,8	21,7	18,1	16,0	
		V	20,1	23,3	23,1	22,8	23,2	13,0	8,5	9,7	9,1	8,8	
Nicaragua	Primary	I	14,4	34,0	23,5	27,6	32,4	1,5	1,2	1,6	1,3	1,1	
		II	18,5	20,7	24,4	18,7	19,8	33,4	32,9	30,6	33,6	35,7	
	Final Goods	III	0,1	0,2	1,6	0,2	0,3	7,2	8,0	7,1	7,0	6,7	
		IV	1,9	0,8	2,7	0,7	0,5	21,1	19,4	23,4	21,6	19,1	
		V	64,3	43,8	47,3	52,3	46,5	35,8	37,5	36,3	35,5	36,4	
Guatemala	Primary	I	C. Zone	32,8	21,4	9,3	10,0	9,8	1,8	2,0	1,3	1,4	1,2
			FTZ+2989*/			1,2	1,3	1,3			0,3	0,4	0,4
	Intermediates	II	C. Zone	28,8	38,0	15,8	18,0	17,6	39,3	40,8	32,8	28,8	29,1
			FTZ+2989*/			4,8	4,4	4,9			21,8	22,8	24,0
		III	C. Zone	0,6	0,9	0,6	0,6	0,5	10,3	9,1	5,8	5,7	5,5
			FTZ+2989*/			0,2	0,2	0,3			0,4	0,4	0,6
	Final Goods	IV	C. Zone	2,1	2,4	1,3	1,3	1,4	23,7	18,8	14,3	14,7	14,6
			FTZ+2989*/			0,4	0,5	0,5			1,1	1,0	1,4
		V	C. Zone	34,7	36,4	15,4	16,8	16,1	24,0	28,2	18,5	19,8	19,0
			FTZ+2989*/			50,9	46,9	47,6			3,7	4,9	4,2

* / Guatemalan trade data by special regimens is not available for this year

a/ I : Primary goods; Intermediate goods: II: semi-finished products, III: Parts and Components; Final Goods: IV: Capital goods, V: consumption goods
Data source: Authors' calculations based on COMTRADE and the Bank of Guatemala databases

Nicaragua's trade structure is dominated by final goods, with consumption goods holding the most relevant shares in both exports and imports. However, the relative high participation of semi finished goods imports is noticeable, whilst parts and components have a relatively small share. On the exports side, the participation of primary goods has enormously increased - from 14% in 2000 to 32% in 2004 -, indicating that the country still maintains a high dependence on trade in traditional goods. Exports in parts and components are negligible, suggesting how poorly linked is the manufacturing sector to high-tech production chains, though perhaps highly connected to low-tech ones.

Guatemala's trade composition is a bit similar to *Nicaragua's*. The high relative participation of semi-finished goods imports, along with the high share of final goods exports, reflect that it is also connected to low-tech production chains. Guatemalan imports are mostly concentrated on intermediate goods, with semi-finished products taking an overwhelming share of 53%, in 2004. The bulk of these imports comes through the two special customs regimes already mentioned, the free trade zone and Decree 2989, benefiting export-oriented industries. On the export side, final goods have the highest participation, mainly delivered through special customs zones. Contrary to *Nicaragua*, exports in primary goods show a

decreasing participation, which evidences not only a substantial change in Guatemala's trade pattern, but also a major dynamism of its manufacturing sector.

We now examine in more in detail, the direction of trade in parts and components by regional blocs. By doing this, we can get some lights on whether the benefits/barriers imposed by partners have influenced the development of the trade patterns.

The South American economies

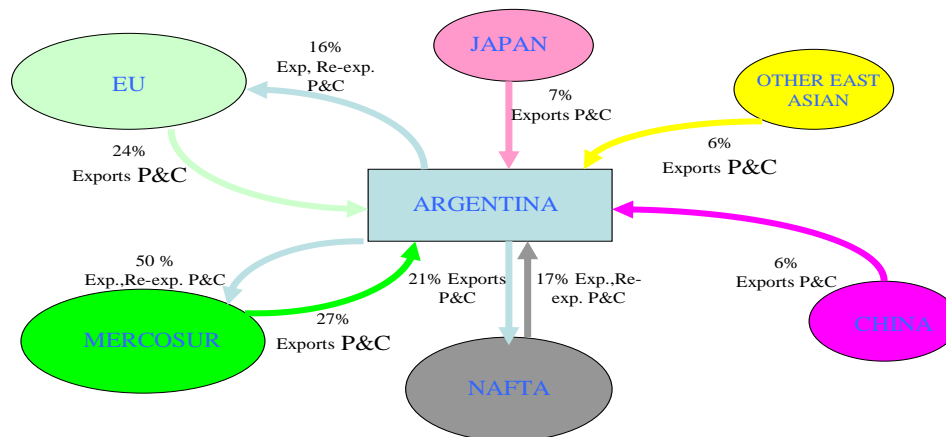
Figure 2 shows the direction of trade in parts and components, for **Argentina**. A South-South trade pattern emerges, thanks to the large amount of trade with MERCOSUR, by far Argentina's leading partner in either imports or exports in parts and components. As Table 3¹² shows, the share of MERCOSUR in total Argentinian imports in parts and components increased persistently from 22% in 2000 to 27% in 2004. By contrast, the share of MERCOSUR in total Argentinian exports in parts and components decreased from 56% in 2000 to 44% in 2003, recovering in 2004 to 50%. Inside this bloc, Brazil constitutes the leading partner (see Table 4), which is not surprising since both countries maintain intra-industry linkages, especially in the automotive sector.

Though the share of the European Union (EU) is declining; it still represents another important market to which Argentina supplies parts and components. The EU accounted for 25% of total Argentinian imports in parts and components in 2004, down from 31% in 2000. Exports to the EU slightly increased from 14% in 2000 to 16% in 2004. Inside this bloc, Germany and Spain display the most representative shares in both imports and exports, in 2004 (see Table 4).

NAFTA represents the third supplier of parts and components, with 17% of total respective imports in 2004 (decreasing from 22 % in 2000, see table 3). This lower figure is mainly explained by the fall of the US share, which recorded only 13.8% of total Argentinian imports in part and components in 2004, in sharp contrast with the 18.5% recorded in 2000 (see table 4). Likewise, Mexico shrank slightly its share from 2.2% in 2000 to 1.9% in 2004. On the export side, NAFTA kept a steady share of over 20% during the whole period, though Mexico decreased from 9.4% in 2000 to 6.8% in 2004 (see table 4).

¹² Tables 3 to 24 are in Annex 2.

Figure 2: Argentina, 2004: Direction of trade in parts and components by regional blocs



Source: Authors' estimations based on COMTRADE data.

The share of the “other East Asian bloc” in total imports also decreased from 8% in 2000 to 6% in 2004. The huge increase in imports from China (a two-fold increase in import value, from US\$ 101 m to US\$ 195 m, resulting in an increase in market share from 2.8% in 2000 to 6.3% in 2004) is particularly noteworthy. Japan instead showed a tiny increase from 6.6% in 2000 to 7.2% in 2004. Moreover, “other East Asian bloc” shares in total Argentinean exports in parts and components fell from 1.3% in 2000 to 0.13% in 2004.

While the Argentinian trade in parts and components depicted a pro-South-South pattern, the **Brazilian trade** followed a more North-South pattern. As Table 3 shows the EU has become Brazil's leading supplier, holding around 30% of the total imports in parts and components by the end of 2004. In decreasing order, Germany, Spain, France and Italy are the main sources within this bloc. However, Germany, Spain and Italy decreased slightly their shares from 10%, 3.4%, 4.5% in 2000 to 9%, 2.8% and 4.5% in 2004, respectively. France instead increased its share from 3.5% in 2000 to 5.5% in 2004 (see Table 5).

NAFTA, the second supplier, decreased substantially its share from 36% in 2000 to 25% in 2004 (see Table 4). Inside this bloc, only the US is ranked among the ten top major country partners of Brazilian imports in parts and components. Though it held a quite significant share into the Brazilian market, it declined from 33.4% in 2000 to 22.5% in 2004. This can be explained by the expansion of China, whose penetration in the Brazilian market has rapidly increased.

Imports from Asia are also noteworthy. The “other East Asian bloc” increased from 13% in 2000 to 19% in 2004. Imports from Korea and Taiwan were the most representative within this bloc. Both economies held increasingly shares from 4.3% and 2.5% in 2000, to 7.4% and 3.5% in 2004, respectively. China has substantially increased its share from 3% in 2000 to 8% in 2004.

Table 5 shows that Brazil has diversified its export markets in parts and components. While in terms of value, exports to NAFTA slightly increased from US\$ 2.0 in 2000 to US\$ 2.7 billion in 2004, the relative importance of NAFTA declined from 45% in 2000 to 41% in 2004. This fall is mainly explained by the declining importance of the US, whose share shrank from 35% in 2000 to 31% in 2004.

In contrast, the relative importance of the EU into the Brazilian exports in parts and components rose significantly from 17% in 2000 to 23% in 2004. Three of the four main EU-partners of Brazil increased substantially their share (Germany, France and United Kingdom, from 5.8%; 1.4%; 1.9% in 2000, to 7.5%, 2%; 5% in 2004, respectively).

The share of MERCOSUR fell down from 20% in 2000, to 14% in 2004, due to the significant fall of Argentina's share in the Brazilian exports from 18% in 2000 to 13% in 2004. This helped to re-orient the direction of the Brazilian trade in parts and components towards a more North-South pattern

As regards the Asian blocs, the increase of China's share in the Brazilian exports, from 0.6% in 2000 to 3.6% in 2004, is noteworthy. By contrary, those of Japan and other East Asian bloc are really small and decreasing. This is not unexpected since Brazil represents one of the main locations in which Japanese manufacturing firms develop their activities in Latin American, particularly in the machinery sectors.

The Central American economies

NAFTA represents by far the foremost market from which Guatemala supplies its modest requirements of parts and components. As Table 6 shows, these imports enter the country either by using the common tariff system or the special trade regimes. The US is the leading country partner inside this bloc. However its share went down from 49% in 2000 to 33% in 2004 (see Table 7).

Although the shares of the EU, MERCOSUR and other East Asian are less significant, they increased from 16%; 4%; 8% in 2000, to 17%; 8%; 11% in 2004, respectively. China and Japan instead decreased their shares from 3.5%; 3.6% in 2000 to 1%; 3% in 2004 respectively.

Likewise, several providers of important multinationals from the automotive industry have recently moved their operations of light assembly manufacturing to Nicaragua. Though the sector is not well developed yet; it has led to a faint increase of the Nicaraguan trade in parts and components. As Table 12 shows, Nicaraguan imports in parts and components come primarily from NAFTA, in which the US stays as the top leading country partner, though its relative importance decreased substantially from 46% in 2000 to 34% in 2004 (see Table 13). By contrary, the EU, MERCOSUR and the Asian Region increased their relative importance into the Nicaraguan market.

The small relative importance of parts and components in the import structures of Guatemala and Nicaragua is not surprising, since both countries have an incipient

manufacturing industry. We do not analyze further the direction of exports in parts and components for them, since they are not representative. Moreover, their significance is basically limited to the import structures. Considering that semi-finished products hold quite significant shares in their trade structures, it is convenient - for these countries in particular - to explore the direction of their trade in semi-finished products by regional blocs.

Tables 8 and 9 show that the composition of Guatemalan imports in semi-finished goods did not change much during 2002-2004. Nearly half of the Guatemalan imports are shipped from NAFTA, with the US taking an overwhelming share of 40%. Yet, only 17% of these imports from NAFTA are through the special trade regimes in which the US still take an overwhelming share of 16%. This puts in evidence the huge dependence of Guatemala on the US market.

Other East Asian ranks as the second semi-finished products supplier. It has more than 16% of the Guatemalan market and imports here are mostly by special trade regimes, as several Asian companies, particularly apparel-companies from Korea, delocalized their labour-intensive production activities to this country (see Table 9). The share of CACM (8%) into the Guatemalan imports of semi-finished goods is also noteworthy. El Salvador, Costa Rica and Honduras represent at intra-regional level, the main trade partners of Guatemala.

Guatemalan exports in semi-finished products to CACM as well as to Other East Asia depicted significant changes whilst those to NAFTA and other blocs did not have considerable variations (see Table 10). In 2004, exports to CACM surpassed more than two-fold the export-value reached in 2002 (from 253 to US\$ 516 m dollars) which led to increase its share from 37% in 2002 to 53% in 2004. At the individual country level, Guatemalan exports to CACM member states increased significantly between the two years (see Table 11). Exports to Korea decreased from 85.3 in 2000 to US\$ 33.8 m dollars. As a result, the share of other East Asian decreased notably from 15% in 2002 to 5% in 2004.

As observed in Table 12, *Nicaraguan* imports in semi-finished goods basically came from NAFTA, whose shares steadily increased from 29% in 2000 to 33% in 2004. The US and Mexico are the most significant partners (24% and 8% in 2004, respectively). These shares - in particular that of the US - could be much higher, since the available data do not include Nicaragua's assembly trade which is mainly developed with the US. Furthermore, as in the case of Guatemala, the export-oriented assembly sector has grown supported by national policies to promote FDI and exports in this sector, as well as by the special tariff-preference levels the country enjoys under CAFTA¹³. The shares of CACM went accordingly down from 46% in 2000 to 37% in 2004. Costa Rica keeps the largest share in this bloc (18% in 2004), followed by Guatemala and El Salvador with 11% and 8% respectively for 2004 (see Table 12).

¹³The tariff-preference level establishes that up to 100 million square meters equivalents (SME) of fabric coming from any part of the world may be used to assemble garments in Nicaragua, which will enjoy tariff-free access to the U.S. However this measure was granted for a limited period of time.

The EU is the third most important supplier of semi-finished products. It increased slightly its relative participation from 6% in 2000 to 7% in 2004. By contrary, other East Asian depicted a small participation (2% in 2000 and 3% in 2004), in which Taiwan and Korea performed as the main partners within this bloc¹⁴. These low shares seem to be inconsistent with the level of activity that East Asian companies have in Nicaragua. In fact, aside from the American companies, a number of the operating factories in the apparel and textiles sector are owned by Taiwanese and Korean firms. A possible explanation for this inconsistency could be that our datasets lack information on trade performed under the free zone regimes – the main system used by export-processing firms in Nicaragua -, what may lead us to an underestimation of the effective trade developed by Nicaragua. An alternative explanation might be that several East Asian factories operating in Nicaragua produce garments and textiles products for target American firms. Thus, given the restrictions that several East Asian countries (e.g Taiwan) have to place their products in the US, they could be sourcing themselves either directly (from their headquarters) or indirectly (through other Central American countries).

On the export side, NAFTA and CACM represent the main markets for the Nicaraguan semi-finished products, accounting jointly for over 90% of total imports in these goods (see Table 14). While the US increased steadily from 25% in 2000 to 41% in 2004, Canada, by contrast, reduced substantially its share from 27% in 2000 to 19% in 2004. Inside CACM, Costa Rica, Guatemala and Honduras constituted in decreasing importance the main destinations of Nicaragua's exports in semi-finished goods (see Table 15).

Contrary to the two South American economies, both Guatemala and Nicaragua depict a clear North-South trade pattern which is evidenced by the fact that their trade in intermediate goods (semi-finished products and parts and components) is highly concentrated in a unique market: NAFTA. This can be explained by the unilateral preferential terms granted by the US to these countries under the Caribbean Basin Initiative (CBI) and CAFTA.

Analysis at the product level

Tables 16 to 19 show the relative importance of selected groups of parts and components in the Argentinian and Brazilian trade flows from 2000 to 2004. A key feature of this type of trade is that it is dominated by products related to the automotive industry, a leading manufacturing activity in these countries.

In the case of Argentina, as tables 18 and 19 show, in 2004, the selected products constitute jointly 57% or about US\$1.77 bn of total imports in parts and components and 84% or about \$ 1.02 billion of total exports in these goods. The bulk of exports comprised into these groups increased in US\$ 179.6 m since 2000, but imports decreased in US\$ 108 m since the same year. Five of the twenty major imports are linked to the automotive industry, accounting for over 29% of total imports in parts and components, with parts and accessories for road vehicles (SITC 78439) alone accounting for US\$ 399 m, or about 13% of the total exchange in these goods. Gearboxes (SITC-78434) show a positive trade balance during the

¹⁴ Evidently, the share of these countries in the Nicaraguan import structure of semi-finished goods is also tiny (less than 1%) during the whole period.

whole period, which is explained by the fact that during the last years the sector has attracted investments from leading multinational automakers, induced by the lower production costs and the growing domestic market.

Tables 18-19 also show that products linked to machinery and equipment are fairly significant. Compression-ignition engines (SITC 71323) raised their share from 2.9% in 2000 to 5.7% in 2004, whereas they have reduced their exports shares from 10% in 2000 to 6% in 2004. Exports of parts included in SITC-71819 group accounted for only US\$ 2.5 m of total exports in parts and components, decreasing its relative participation from 2% in 2000 to 0.2% in 2004. However, this group still keeps a positive trade balance.

Products related to the electrical machinery industry, as boards (SITC-77261), parts of electrical ignition (SITC 77833), electrical equipment (SITC 77834) are also noteworthy. These groups jointly accounted for 5% of total exports in parts and components. Office machines products are ranked also as major Argentinian trade in parts and components, parts and accessories for calculating machines (SITC 75997) being the most representative group, with 7% of total imports in parts and components.

Though the relative importance of the selected products into the Argentinian trade in parts and components has risen, the one in the total trade shows another picture. On the export side, stagnation prevails, representing either in 2000 or 2004 only 5% of total exports, whilst on the imports side their relative importance has slightly increased from 81% in 2000 to 84% in 2004.

In the case of Brazil, the major twenty groups represent 42% of total imports in parts and components and about 75% of all exports of this kind in 2004 (see Tables 16 and 17). Half of them record a positive trade balance, since Brazilian manufacturing not only develops assembly activities but also produces some high technology components. Six of the twenty major groups are related to the automotive industry, accounting for 14% of total imports in parts and components and about 32% of total exports. Parts and accessories for motor vehicles (SITC 78439) is the most representative one, having improved its trade balance through time.

Besides the automotive industry, machinery and equipment is also representative. Four of the twenty major groups are related to this sector (71322, 71323, 71391 and 71392). In 2004, they accounted jointly for over 6% of imports and about 29% of exports, rising their relative participation from that showed in 2000 (23%) only on the export side. Among these four groups, piston engines (71322) greatly raised its relative participation from over 4% in 2000 to about 8% in 2004. In decreasing importance, parts and components related to the electronics, telecommunications and aircrafts industries are also included among the major groups.

Although in terms of value added, trade in parts and components has greatly increased, the relative importance of the major groups (now) in total Brazilian exports has not increased significantly. On the imports side, these twenty groups raised their participation in total Brazilian imports from 11% in 2000 to about 13% in 2004. On the exports side, they have

slightly decreased their share into total Brazilian exports from 9% in 2000 to about 8% in 2004.

Additional information about Argentinian and Brazilian trade in parts and components is provided in Table 24. The table presents aggregate information by tabulating the value of exports at the two-digit SITC groups of parts and components. Road motor-vehicles (parts; sub-group 78) is by far the most important category. It accounts for over 55% of Argentinian exports in parts and components, and for 33% in the case of Brazil. A second important category is machinery and equipments which account for 18% of Argentinian exports, but for 31% of the total Brazilian exports in parts and components in 2004. Electronics and telecommunications come then, in decreasing importance. In the case of Brazil, their relative participation has grown. In the case of Argentina, by contrast, electronics has decreased in importance, from 10% in 2000 to 8% in 2004, whereas telecommunications kept a share of 3% during this period.

The data show therefore that Brazil has consolidated its insertion into diverse chains of production of manufactures; but it also has achieved this within a diversified North-South pattern. Argentina, instead, has attained a strong insertion into the automotive chains of production, whereas its insertion within other chains seems still reduced. Moreover, the country retains its insertion within a South-South scheme.

Table 24 depicts the relative importance of selected products of parts and components from 2002 to 2004 in Guatemala's trade. It shows the twenty major imports effectuated through special customs regimes. A key feature of these imports is that they are concentrated in few individual groups. In fact, these twenty account jointly for over 78% or about US\$ 32.1 m of total imports in this kind of goods; the top four holding over 48% of the Guatemalan imports in parts and components under special regimes, with tyres and pneumatics for motor vehicles (SITC: 6251, 6252 and 62551) being the most representative ones. The remaining groups are related to parts and components for specialised machinery, used in industries such as textiles, food and electronics. Yet, as it can be observed, the relative importance of imports in parts and components in the total imports through special regimes is insignificant (0.3%). Moreover, a negative trade balance is recorded for nearly all of the selected products, something not unexpected since Guatemala has a low comparative advantage in intensive skill manufactures.

Nonetheless, thanks to low unskilled labour cost, the country enjoys comparative advantages in assembly activities. We thus analysed also the relative importance that semi-finished products have in the trade flows. Table 20 depicts the imports through special regimes of the selected semi-finished products, from 2002 to 2004. Although the twenty products represent only 36% of total Guatemala's imports in semi-finished products, they also account jointly for over 13% of total imports through special regimes in 2004. Moreover, the data highlights that most of the selected groups are related to semi-finished products used in the apparel and textile industries. Knitted or crocheted fabrics (SITC 65529) is the most representative, especially since it has experienced a notable growth in its relative participation in Guatemala's imports in semi-finished products through special regimes, going from 3% in 2002 to about 13% in 2004. Almost all the selected groups record huge negative trade

balances, suggesting that Guatemala is a net importer of the inputs required in assembly activities.

Table 20 provides additional information about the relative importance of semi-finished products into Guatemala's trade through special regimes. Imports of semi-finished for the textile industry are by far the most representative items. In fact, in 2004, two-digit textiles (SITC 65) accounted for about 70% of total imports in semi-finished products, followed by miscellaneous manufactured articles (SITC 89) with 4%, and paper articles (SITC 64) with 3.5%.

In the case of Nicaragua, it is not possible to analyse in detail the importance of trade in semi-finished products, since COMTRADE data do not include the special regimes. Nevertheless, the National Commission of Free Trade Zones (CNZF, Spanish acronym) publishes general statistics on trade through the free trade zones. Though limited, such statistics provide useful information on how this type of trade has evolved since 2002. According to CNZF, in 2002, its imports were over US\$ 267 m, whereas exports went over US\$ 346 m. In terms of value-added, the activities in free trade areas represented over US\$ 111 m, with textiles and apparel accounting for about 90% of the total¹⁵. In 2004, imports surpassed US\$ 441 m - 65% more than those in 2002. Similarly, exports rose to US\$596 m, about 72% more than 2002 exports. This trade is highly related to assembly activities. Table 25 helps to identify what major products groups are of primary importance in trade of free zones. Apparel is by far the most representative group. In 2004, it accounted for US\$396 m, or over 65% of total Nicaraguan imports through free zones, and US\$ 484 m or about 66% of total exports through this regime.

¹⁵ For further details, see the Annual trade statistics 2002-2003 page 1449, National Commission of Free Trade Zones (CNZF) and Ministry of Industry and Trade (MIFIC) <http://www.mific.gob.ni/anuario2003/index.html>

Table 25: Nicaragua's trade in Free Trade Zones

Description	Add-Value				Exports				Imports			
	(thousand \$)		Share (%)		(thousand \$)		Share (%)		(thousand \$)		Share (%)	
	2002	2003	2002	2003	2004	2005	2004	2005	2004	2005	2004	2005
Fixed vegetable fats and oils					795.83	1070.09	0.13	0.1				0.0
Medical accessories						38.48		0.0		29.35		0.0
Furnishing articles, n.e.s.	15.96	339.79	0.001	0.25	1497.36	1672.44	0.25	0.2	491.12	620.89	0.11	0.1
Parts and accessories for road vehicles	957.03	7818.23	0.86	5.83	71554.86	208205.96	11.99	28.2	14396.03	50863.89	3.26	9.2
Plastics bags for packing purposes									250.90	300.00	0.06	0.1
Embroidery, engraving and prints									551.19	600.00	0.12	0.1
Wood boxes and cases for tobacco					552.06			0.09	187.50	200.00	0.04	0.0
Cartons, boxes and cases,	1272.15	1013.42	1.14	0.76					5159.49	3869.62	1.17	0.7
Footwear	996.63	1672.17	0.89	1.25	531.79			0.09	320.00	350.00	0.07	0.1
Vegetables						860.00		0.1		5000.00		0.9
Electrical apparatus for domestic use (assembled)					89.98			0.02	19.32		0.00	0.0
Rubber wound									2270.19	1702.64	0.51	0.3
Articles and accessories for billiards												0.0
Wigs, false beards, eyebrows and eyelashes,					17.86			0.00	15.78	11.84	0.00	0.0
Metallic furniture					251.19	322.00	0.04	0.0	271.97	203.98	0.06	0.0
Chemical preparations for apparel products									479.96	510.00	0.11	0.1
Tobacco and tobacco manufactures	7279.22	8923.33	6.53	6.65	36407.19	33367.03	6.10	4.5	12354.23	15823.19	2.80	2.9
Electronic cards					3.13			0.00	5.72		0.00	0.0
Telecommunications	317.2	249.68	0.28	0.19	45.82			0.01				0.0
Textiles	331.72	716.51	0.3	0.53	0.45			0.00	8562.66	11416.88	1.94	2.1
Apparel	99851.52	112099.97	89.58	83.58	484974.53	493593.34	81.27	66.8	396019.18	458500.74	89.73	83.4
Others n.e.s	444.98	1286.41	0.4	0.96								
All above	111466.41	134119.51	100	100	596722.04	739129.34	100	100	441355.24	550003.00	100.0	100.0

Data source: Extracted from Annual reports of 2003-2004 and 2005-2006, National Commission of Free Trade Zones (CNZF) of Nicaragua

Besides the apparel industry, parts and accessories linked to the automotive sector have greatly gained importance in the trade through free zones. On the imports side, it went from 3% in 2004 to over 9% in 2005, whilst in the exports side, from 9% in 2004 to 28% in 2005. This might be explained by the substantial foreign investments from multinationals - providers of renowned automakers -, which established base plants for light assembly of automotive manufactures.

The Central American dependence

All until now highlights that Guatemala and Nicaragua have not succeeded yet in diversifying their participation in fragmented processes. Even though they belong to the world apparel and textile chain, their participation is merely limited to assembly activities. Furthermore, their North-South trade pattern is largely dependent on a unique market, the US. Several factors have contributed to this. Low labour costs, trade and FDI policies and the location advantages are only a few. But this has several implications from an economic and policy point of view.

First, from 2001 to 2003, Guatemala held a steady but small share of 2.3% in the total US imports of apparel and textiles (see Table 26). Yet, since 2005, this share has quickly declined, reaching only 1.8% of the US market by the end of 2006. Nicaragua's share is even

smaller. Moreover, spite that it increased from 0.5% in 2001 to 0.9% in 2006, it remains quite insignificant yet. This suggests that as long as Nicaragua and Guatemala remain confined to a unique market, they will also stay highly exposed to the US policies, which might unexpectedly destabilize their economies. Hence, it highlights the importance for these economies to define policy measures towards attaining a diversified North-South shared production pattern.

Second, Guatemala and Nicaragua face huge competition in apparel and textiles. Their share in the world market of apparel and textiles is not only threatened by China but also by their neighbours. By analyzing the shares of their closer competitors in the US market of apparel and textiles, we find that, in a global context, the share of Central American countries has decreased in the US imports in apparel and textiles. However, Table 26 shows that Honduras holds a higher share in the US market than Guatemala. In this sense, it puts forward the urgency that Guatemala implements policy measures aimed at recovering its share in the US market, as well as enhancing its competitiveness.

Table 26: Trends in US apparel and textiles imports from Central American countries.

Partner	Imports (millions US\$)						Share (%)					
	2001	2002	2003	2004	2005	2006	2001	2002	2003	2004	2005	2006
WORLD	70240	72183	77434	83310	89205	93277						
Honduras	2348	2444	2507	2678	2629	2445	3,3	3,4	3,2	3,2	2,9	2,6
Guatemala	1614	1669	1773	1959	1831	1678	2,3	2,3	2,3	2,4	2,1	1,8
Dominican Republic	2274	2173	2128	2066	1855	1550	3,2	3,0	2,7	2,5	2,1	1,7
El Salvador	1646	1709	1758	1757	1646	1433	2,3	2,4	2,3	2,1	1,8	1,5
Nicaragua	374	433	484	595	716	879	0,5	0,6	0,6	0,7	0,8	0,9
Costa Rica	753	730	594	524	492	479	1,1	1,0	0,8	0,6	0,6	0,5
Total Central America							9,5	9,3	8,7	8,3	7,3	6,5

Source: Official statistics of the US Department of Commerce. International Trade Administration Office of Textiles and apparel.

For Nicaragua, the picture looks even more complex, since it is one of the countries with less penetration in the US market of apparel and textiles. Yet, taking into account that Nicaragua is increasing its relative participation, supported by the temporary benefits granted by CAFTA, the country should not disregard the implementation of measures towards the strengthening of its competitiveness, as a mechanism to enhance its share in the world market of apparel and textiles.

Finally, the US keeps a very restrictive trade policy, which leads most Central American companies engaged in production sharing to have an incentive for minimizing their local purchases of inputs, since only components made in the US are exempted from imports duties when the finished product is shipped back there. As a result, the integration between export-oriented activities and the local economy is being hindered, limiting the usefulness of production sharing as a stepping-stone to higher stages of industrialization. This also shows up the importance that these economies search for new opportunities to connect themselves to other world chains of production.

5. CONCLUSIONS: PERSPECTIVES AND POLICY REMARKS.

Sharing production has become a key feature of the world economy. It raises important implications for the development of the economies that can participate in it, but it also decreases the opportunities for those countries out of the process.

This paper constituted a first attempt to assess the importance of sharing production for four Latin American countries: Argentina, Brazil, Guatemala and Nicaragua. Further research must necessarily be done to capture the essence and real effects of this phenomenon in each of them.

The four countries studied have reached their insertion, or lack of, in production sharing processes by following different trade patterns. Guatemala and Nicaragua exhibit a clear North-South trade pattern. Nonetheless, their share in fragmented chains of production is still small, and threatened not only by a huge international competition but also by their strict dependence on a unique market. Brazil has consolidated a modest participation in a few production chains, holding a more diversified North-South trade pattern. Argentina has attained a reasonable participation in the automotive chain of production, but its insertion in other chains seems still quite limited. It shows a more South-South trade pattern, exposing it to a certain degree of dependence on its South American neighbours.

In a broader perspective, though Brazil stands somewhat better and the Caribbean countries worse, the four economies share a more similar insertion. All are small (or very small) exporters of parts and components, as well as small importers of them (Brazil, here, being the exception). All are big importers of semi-finished, and big (to very big) exporters of final consumption goods. They are also big (or “small to big”) exporters of semi-finished, but, with the exception of the car industry, these are barely processed commodities or natural produce, with a low value-added. Drawn, as it was, from so different countries, this common evidence suggests that, as regards international fragmentation, Latin America remains close to midgets, and quite far from the champions.

Policy implications of the above are manifold. They range from the pattern of the division of labour in the continent to the sustainability of each individual country trade flows. Nowadays better times for most Latin American economies seem to be *the* moment to address a courageous rethinking of this situation. This should contemplate a dual objective. Improve the present insertion in global chains, while creating more employment opportunities inside each country and strengthening the links among the different economies in the continent. Reconcile both is neither obvious, though nor impossible.

REFERENCES

- Ando, M. (2006) "Fragmentation and vertical intra-industry trade in East Asia.", *The North American Journal of Economics and Finance* 17 (3): 257-281.
- Arndt, S. W. (1998) "Super-specialization and the gains from trade", *Contemporary Economic Policy* 16 (4): 480.
- Athukorala, P., & Yamashita, N. (2006) "Production fragmentation and trade integration: East Asia in a global context.", *The North American Journal of Economics and Finance*: 17 (3): 233-256.
- Feenstra, R. C., Hanson, G., & Swenson D. L. (1998). "Offshore Assembly from The US: Production Characteristics of the 9802 Program", *National Bureau of Economic Research- NBER, Working Paper (98-10)*
- Feenstra, R. C. (1998) "Integration of Trade and Disintegration of Production in the Global Economy", *Journal of Economic Perspectives* 12(4): 31-50.
- Fontagne, L., Freudenberg, M., & Unal-Kesenci, D. (1999) "Trade in technology and quality ladders: where do EU countries stand?", *International Journal of Development Planning Literature* 14(4): 561-582.
- Fontagné, L. & Freudenberg Michael. (1997), "Intra-Industry Trade Methodological Issues Reconsidered.", *CEPII, Working paper (97-01)*.
- Grossman, G. M., & Helpman Elhanan. (2002), "Outsourcing in a Global Economy.", *National Bureau of Economic Research- NBER, Working paper (8728)*.
- Görg, H. (2000) "Fragmentation and trade: US inward processing trade in the EU. *Review of World Economies.*", *Review of World Economics / Weltwirtschaftliches Archives* 136(3): 403-422 .
- Hummels, D., Ishii, J., & Yi, K.-M. (2001) "The nature and growth of vertical specialization in world trade.", *Journal of International Economics* 54(1): 75-96.
- Hummels, D., Rapoport, D., & Yi.Kei-Mu. (1997) "Globalisation and the Changing Nature of World Trade." *Economic Policy Review* 3(2): 53-81.
- Jones, R., Kierzkowski, H., & Lurong, C. (2005) "What does evidence tell us about fragmentation and outsourcing?: Outsourcing and Fragmentation:Blessing or threat", *International Review of Economics & Finance* 14(3): 305-316.
- Jones, R. W., & Kierzkowski, H. (2005) "International fragmentation and the new economic geography", *North American Journal of Economics & Finance* 16(1): 1-10.
- Kimura, F., & Ando, M. (2005) "Two-dimensional fragmentation in East Asia: Conceptual framework and empirics: Outsourcing and Fragmentation:Blessing or threat.", *International Review of Economics & Finance* 14(3): 317-348.
- Lafay G. (1994) "The measurement of revealed comparative advantages.", in: M. G. Dagenais and P. A. Muet (Eds.), *International Trade Modeling*.
- Lemoine, F., and Unal-Kesenci, D. (2004) "Assembly Trade and Technology Transfer: The Case of China", *World Development* 32(5): 829-850.
- Sanyal, K. K., and Jones, R. W. (1982) "The Theory of Trade in Middle Products", *American Economic Review*, 72(1): 16.
- Van Long, N., Riezman, R., and Soubeyran, A. (2005) "Fragmentation and services: Fragmentation and Services in the Modern Economy", *The North American Journal of Economics and Finance*, 16(1) :137-152.

Yeats, A. (2001) "Just How Big is Global Production Sharing?", in: Fragmentation: New Production Patterns in the World Economy. Edited by .Sven W Arndt. Oxford University Press .

ANNEX I: THE LEMOINE & UNAL-KESENCI CLASSIFICATION ADOPTED

Stages of production		BEC code	Bec description
Primary goods		111	Food and beverages mainly for industry
		21	Industrial supplies, n.e.c, primary
		31	Fuels and Lubricants, primary
Intermediate goods	Semi-finished goods	121	Food and beverages, processed, mainly for industry
		22	Industrial supplies, n.e.c, processed
		321	Motor spirit
		322	Other processed fuels and lubricants
Intermediate goods	Parts and Components	42	Parts and components of capital goods, except for transport equipment
		53	Parts and components of transport equipment
Final goods	Capital goods	41	Capital goods except transport equipment
	Capital goods	521	Other industrial transport equipment
	Consumption goods	112	Food and beverages, primary, mainly for household consumption
		122	Food and beverages, primary, processed, for house consumption
		51	Passanger motor cars
		522	Other non-industrial transport equipment
		61	Durable consumer goods n.e.c
62	Semi-durable consumer goods n.e.c.		
63	Non-durable consumer goods n.e.c.		

ANNEX II: SELECTED TABLES (TABLES 3 TO 24)

Table 3: Argentinian and Brazilian trade in parts and components, by economic blocs.

Blocs	Exports in P&C (value in thousands \$)									
	Argentina					Brazil				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
JAPAN	439	5136	4543	1642	1795	96842	22423	68977	18722	26607
CAN	21140	26137	22446	20400	43737	179831	259390	203157	204328	387989
CHINA	8613	1340	1993	4143	11539	26465	101747	152824	353755	240873
OTHER EAST ASIAN ^{b/}	13615	34076	18738	1564	1623	88513	86821	65443	65948	67064
EU ^{a/}	139885	146576	159785	177265	196349	770928	922298	988899	1164429	1512625
MCCA	1862	1860	1993	2424	2844	26064	27975	32570	33651	55330
MERCOSUR	581289	446576	389141	395307	597791	906946	747634	386166	567411	957142
NAFTA	210948	182725	199586	225816	258099	2031742	1947987	2135134	2296719	2728034
ROW	60109	58416	59196	73732	90115	416827	433210	469641	658348	752442
	Share (%) ^{*/}									
JAPAN	0.0	0.6	0.5	0.2	0.1	2.1	0.5	1.5	0.3	0.4
CAN	2.0	2.9	2.6	2.3	3.6	4.0	5.7	4.5	3.8	5.8
CHINA	0.8	0.1	0.2	0.5	1.0	0.6	2.2	3.4	6.6	3.6
OTHER EAST ASIAN ^{b/}	1.3	3.8	2.2	0.2	0.1	1.9	1.9	1.5	1.2	1.0
EU ^{a/}	13.5	16.2	18.6	19.6	16.3	17.0	20.3	22.0	21.7	22.5
MCCA	0.2	0.2	0.2	0.3	0.2	0.6	0.6	0.7	0.6	0.8
MERCOSUR	56.0	49.5	45.4	43.8	49.7	20.0	16.4	8.6	10.6	14.2
NAFTA	20.3	20.2	23.3	25.0	21.4	44.7	42.8	47.4	42.8	40.5
ROW	5.8	6.5	6.9	8.2	7.5	9.2	9.5	10.4	12.3	11.2
	Imports in P & C (value in thousands \$)									
JAPAN	239847	275982	103624	142428	223500	1287666	1177287	926446	1090100	1281661
CAN	1979	2466	942	1824	3491	10565	10784	9487	9351	10367
CHINA	101738	125118	31343	105145	195259	322277	339270	408068	601564	1109917
OTHER EAST ASIAN ^{b/}	276264	238675	46550	98321	184864	1627137	1514084	1505782	1714545	2529569
EU ^{a/}	1138325	746433	378711	472927	784036	3640200	3837819	3223710	3178237	4072007
CACM	1356	3963	831	4523	14465	26295	27061	25661	45286	71419
MERCOSUR	805141	690767	330962	493301	838596	525300	416952	367564	362462	572624
NAFTA	783957	650705	273830	351819	522881	4430376	4094922	2869631	2753088	3414278
ROW	301743	225781	124746	174105	344393	318103	363144	413705	573197	437383
Grand Total	3650350	2959890	1291539	1844392	3111485	12187919	11781323	9750053	10327830	13499225
	Share (%) ^{*/}									
JAPAN	6.6	9.3	8.0	7.7	7.2	10.6	10.0	9.5	10.6	9.5
CAN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHINA	2.8	4.2	2.4	5.7	6.3	2.6	2.9	4.2	5.8	8.2
OTHER EAST ASIAN ^{b/}	7.6	8.1	3.6	5.3	5.9	13.4	12.9	15.4	16.6	18.7
EU ^{a/}	31.2	25.2	29.3	25.6	25.2	29.9	32.6	33.1	30.8	30.2
CACM	0.0	0.1	0.1	0.2	0.5	0.2	0.2	0.3	0.4	0.5
MERCOSUR	22.1	23.3	25.6	26.7	27.0	4.3	3.5	3.8	3.5	4.2
NAFTA	21.5	22.0	21.2	19.1	16.8	36.4	34.8	29.4	26.7	25.3
ROW	8.3	7.6	9.7	9.4	11.1	2.6	3.1	4.2	5.6	3.2

Source: Authors' calculations based on COMTRADE databases

a/ From 2000 to 2003 "EU" includes EU-15 members. For 2004 It also considers the new member states of: Cyprus, Estonia Czech Republic, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia

b/ "Other east Asian" includes the Association of Southeast Asian Nations (ASEAN4: Indonesia, the Philippines, Thailand and Malaysia), and Newly Industrializing Economies 4 (NIEs4: Taiwan, Korea, Hong Kong and Singapore)

* / Share of total country's exports (imports) in parts and components

Table 4: Argentinian imports and exports in parts and components, by main partners.

Partner	Imports (value in thousands \$)					Share(%) ^{*/}				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Brazil	780820	673379	314412	473333	807767	21.4	22.8	24.3	25.7	26.0
China	101738	125118	31343	105145	195259	2.8	4.2	2.4	5.7	6.3
Germany	271495	179319	130990	162013	244049	7.4	6.1	10.1	8.8	7.8
Spain	154186	111918	76122	87120	126870	4.2	3.8	5.9	4.7	4.1
France	319958	188003	45206	69542	113654	8.8	6.4	3.5	3.8	3.7
United Kingdom	74497	74520	49529	37827	51634	2.0	2.5	3.8	2.1	1.7
Italy	125356	103856	36373	52106	100187	3.4	3.5	2.8	2.8	3.2
Japan	239847	275982	103624	142428	223500	6.6	9.3	8.0	7.7	7.2
Areas Nes.	201824	156336	79970	116235	278717	5.5	5.3	6.2	6.3	9.0
USA	673522	577944	233838	301925	429955	18.5	19.5	18.1	16.4	13.8
	Exports (value in thousands \$)					Share(%) ^{*/}				
Brazil	529704	420704	372343	380179	575864	51.0	46.6	43.4	42.1	47.8
Chile	28850	27629	30149	33122	39286	2.8	3.1	3.5	3.7	3.3
Germany	59981	75148	60369	84248	58392	5.8	8.3	7.0	9.3	4.9
Spain	35141	28709	37057	25062	67568	3.4	3.2	4.3	2.8	5.6
France	23407	17454	20109	22426	19569	2.3	1.9	2.3	2.5	1.6
Mexico	97649	73279	74247	91627	81799	9.4	8.1	8.7	10.2	6.8
Sweden	10105	5205	21699	20468	8503	1.0	0.6	2.5	2.3	0.7
Uruguay	42574	20402	12922	10622	15652	4.1	2.3	1.5	1.2	1.3
USA	109231	102790	123304	127864	166906	10.5	11.4	14.4	14.2	13.9
Venezuela	10856	15316	7516	6530	21922	1.0	1.7	0.9	0.7	1.8

Data source: Authors' calculations based on COMTRADE database

* / Share of total country's imports/exports in parts and components

Table 5: Brazilian imports and exports in parts and components, by main partners.

Partner	Imports (value in thousands \$)					Share(%) ^{*/}				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Argentina	518880	408133	356764	355136	561921	4.3	3.5	3.7	3.4	4.2
China	322277	339270	408068	601564	1109917	2.6	2.9	4.2	5.8	8.2
Germany	1174510	1237783	1099489	1135407	1186890	9.6	10.5	11.3	11.0	8.8
Spain	418565	469949	365281	331562	375372	3.4	4.0	3.7	3.2	2.8
France	428487	509975	442669	494480	747601	3.5	4.3	4.5	4.8	5.5
Italy	546447	576557	467811	398627	538493	4.5	4.9	4.8	3.9	4.0
Japan	1287666	1177287	926446	1090100	1281661	10.6	10.0	9.5	10.6	9.5
Korea Rep.	529122	539882	500446	600376	997159	4.3	4.6	5.1	5.8	7.4
Taiwan	309305	260172	299274	263809	475049	2.5	2.2	3.1	2.6	3.5
USA	4072705	3785420	2582988	2482985	3035587	33.4	32.1	26.5	24.0	22.5
	Exports (value in thousands \$)					Share(%) ^{*/}				
Argentina	816417	663169	322199	467898	848106	18.0	14.6	7.2	9.7	12.6
Chile	102727	105144	125915	114646	180818	2.3	2.3	2.8	2.4	2.7
China	26465	101748	152824	341224	240873	0.6	2.2	3.4	7.1	3.6
Germany	262881	295552	331632	357262	506125	5.8	6.5	7.4	7.4	7.5
France	63287	92630	84740	94349	146989	1.4	2.0	1.9	2.0	2.2
United Kingdom	87000	186830	261086	284468	344557	1.9	4.1	5.8	5.9	5.1
Italy	142110	135833	129953	150235	180936	3.1	3.0	2.9	3.1	2.7
Mexico	374769	410502	436436	401541	589704	8.2	9.0	9.7	8.3	8.8
USA	1610701	1475147	1644796	1775110	2064826	35.4	32.4	36.5	36.7	30.7
Venezuela	99919	165109	100827	85883	235117	2.2	3.6	2.2	1.8	3.5

Source: Authors' calculations based on COMTRADE databases

* / Share of total country's imports/exports in parts and components

Table 6: Guatemalan trade in parts and components, by economic blocs.

Bloc Partner	Imports (value in thousands \$)									Share(%)* /								
	C.Trade					FTA+ DL2989				C. Trade					FTA+ DL2989			
	2000	2001	2002	2003	2004	2002	2003	2004	2000	2001	2002	2003	2004	2002	2003	2004		
JAPAN	2387	2804	2180	2478	2389	174	54	141	6.4	7.5	3.3	3.7	2.8	0.3	0.1	0.2		
CAN	252	360	272	346	686	444	1526	3269	0.7	1.0	0.4	0.5	0.8	0.7	2.3	3.9		
CHINA	517	734	2165	2418	787	131	511	371	1.4	2.0	3.3	3.6	0.9	0.2	0.8	0.4		
OTHER EAST ASIAN ^{b/}	2514	2779	1401	1432	4006	3030	3834	5226	6.8	7.4	2.1	2.2	4.8	4.6	5.8	6.2		
EU ^{a/}	5246	5374	5349	4739	5885	4957	3169	8195	14.2	14.4	8.1	7.1	7.0	7.5	4.8	9.7		
CACM	1066	1370	1868	1896	2039	240	725	1783	2.9	3.7	2.8	2.9	2.4	0.4	1.1	2.1		
MERCOSUR	681	839	1065	1211	1574	1816	3809	4957	1.8	2.2	1.6	1.8	1.9	2.8	5.7	5.9		
NAFTA	23007	21667	21380	19176	20567	13103	9825	10172	62.2	58.1	32.5	28.8	24.4	19.9	14.8	12.1		
ROW	1342	1391	1776	2401	3142	2371	4934	7003	3.6	3.7	2.7	3.6	3.7	3.6	7.4	8.3		
Exports (value in thousands \$)									Share(%)* /									
JAPAN		5		1		0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CAN	355	252	285	398	598	0	2	46	2.7	1.5	1.0	1.3	1.6	0.0	0.0	0.1		
CHINA				12	72	0	0	0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0		
OTHER EAST ASIAN ^{b/}		78	49		22	0	1	2	0.0	0.5	0.2	0.0	0.1	0.0	0.0	0.0		
EU ^{a/}	362	80	164	694	273	90	5	17	2.7	0.5	0.6	2.2	0.7	0.3	0.0	0.0		
CACM	4207	8066	10511	13185	15743	3084	7460	13743	31.6	47.1	37.7	42.7	41.0	11.0	24.2	35.8		
MERCOSUR	157	31	32	79	16	25	0	5	1.2	0.2	0.1	0.3	0.0	0.1	0.0	0.0		
NAFTA	6691	6761	8053	6260	4693	396	257	350	50.2	39.5	28.8	20.3	12.2	1.4	0.8	0.9		
ROW	1545	1858	943	1953	2073	4283	536	785	11.6	10.8	3.4	6.3	5.4	15.3	1.7	2.0		

Data source : Authors' calculation based on databases from COMTRADE and The Bank of Guatemala.

a/ From 2000 to 2003 "EU" includes the EU-15 member states. For 2004 It also considers the following new member states: Cyprus, Estonia

Czech Republic, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia

b/ "Other East Asian" includes the Association of Southeast Asian Nations (ASEAN4: Indonesia, the Philippines, Thailand and Malaysia), and Newly Industrializing Economies 4(NIEs4: Taiwan, Korea, Hong Kong and Singapore)

* / Share of total country's imports in parts and components

Table 7: Guatemalan trade in parts and components, by major partners.

Partner	Imports (value in thousands \$)									Share(%)* /								
	C.Trade					FTA+ DL2989				C. Trade					FTA+ DL2989			
	2000	2001	2002	2003	2004	2002	2003	2004	2000	2001	2002	2003	2004	2002	2003	2004		
Brazil	614	704	1017	1151	1470	1816	3807	4956	1.7	1.9	1.6	1.8	1.8	2.9	5.9	6.0		
China	517	734	2165	2418	787	131	511	371	1.4	2.0	3.4	3.8	1.0	0.2	0.8	0.5		
Germany	1542	2128	1915	1893	2125	2077	1697	2401	4.2	5.7	3.0	2.9	2.6	3.3	2.6	2.9		
Spain	887	802	1086	617	686	414	468	3553	2.4	2.1	1.7	1.0	0.8	0.6	0.7	4.3		
Italy	620	680	581	806	803	1012	542	1831	1.7	1.8	0.9	1.2	1.0	1.6	0.8	2.2		
Japan	2387	2804	2180	2478	2389	174	54	141	6.4	7.5	3.4	3.8	2.9	0.3	0.1	0.2		
Korea Rep.	569	570	961	915	848	2649	3374	3085	1.5	1.5	1.5	1.4	1.0	4.2	5.2	3.8		
Mexico	2976	2777	2222	1973	2338	909	1112	536	8.0	7.4	3.5	3.1	2.8	1.4	1.7	0.7		
Taiwan	1641	1634			2492	43	120	601	4.4	4.4	0.0	0.0	3.0	0.1	0.2	0.7		
United States of	18764	17934	18965	16944	17884	12173	8565	9489	50.7	48.1	29.8	26.3	21.8	19.1	13.3	11.5		
Exports (value in thousands \$)									Share(%)* /									
Belize	155	147	246	433	494	48	145	467	1.2	0.9	0.9	1.4	1.3	0.2	0.5	1.2		
Chile	508	378	6	369	45	0	0	9	3.8	2.2	0.0	1.2	0.1	0.0	0.0	0.0		
Costa Rica	1087	1111	1500	1505	1402	968	2034	3143	8.2	6.5	5.4	4.9	3.6	3.5	6.6	8.2		
Honduras	876	1468	2054	2501	4575	580	1736	2975	6.6	8.6	7.4	8.1	11.9	2.1	5.6	7.7		
Mexico	425	5444	277	3130	1374	18	23	11	3.2	31.8	1.0	10.1	3.6	0.1	0.1	0.0		
Nicaragua	639	1624	1909	2668	3654	422	1401	3366	4.8	9.5	6.8	8.7	9.5	1.5	4.5	8.8		
Netherlands		2	9	504	91	0	320	55	0.0	0.0	0.0	1.6	0.2	0.0	1.0	0.1		
Panama	507	322	327	210	1008	3868	30	186	3.8	1.9	1.2	0.7	2.6	13.9	0.1	0.5		
El Salvador	1606	3863	5049	6511	6112	1113	2290	4259	12.1	22.5	18.1	21.1	15.9	4.0	7.4	11.1		
United States of	6266	1313	7748	3039	3298	378	217	339	47.1	7.7	27.8	9.9	8.6	1.4	0.7	0.9		

Source : COMTRADE, Bank of Guatemala statistics

* / Share of total country's imports/exports in parts and components

Table 8: Guatemalan imports in semi-finished products, by economic blocs.

Block Partner	Imports (value in thousands \$)									
	2000		2001		2002		2003		2004	
	C.Trade	C.Trade	C.Trade	FTA+D2989	C.Trade	FTA+D2989	C.Trade	FTA+D2989		
JAPAN	14672	12846	16081	7822	5403	7220	12248	8066		
CAN	73224	61718	50633	6610	43174	9498	50161	9697		
CHINA	15618	25515	58286	45244	50518	79055	39273	105419		
OTHER EAST ASIAN ^{b/}	30842	44900	52668	529267	46780	549547	72797	626953		
EU ^{a/}	138156	146512	185066	42030	179876	30510	183000	54393		
CACM	174718	252012	249887	33026	247666	35292	274576	46376		
MERCOSUR	44801	58559	34920	14612	48421	6776	60718	13999		
NAFTA	745627	832302	1178276	597181	1060174	597991	1265744	678884		
ROW	169621	226079	305942	142498	154055	138565	207949	240380		
Share (%) ^{*/}										
JAPAN	1.0	0.8	0.5	0.2	0.2	0.2	0.3	0.2		
CAN	5.2	3.7	1.4	0.2	1.3	0.3	1.3	0.2		
CHINA	1.1	1.5	1.6	1.3	1.5	2.4	1.0	2.7		
OTHER EAST ASIAN ^{b/}	2.2	2.7	1.5	14.9	1.4	16.7	1.8	15.9		
EU ^{a/}	9.8	8.8	5.2	1.2	5.5	0.9	4.6	1.4		
CACM	12.4	15.2	7.0	0.9	7.5	1.1	7.0	1.2		
MERCOSUR	3.2	3.5	1.0	0.4	1.5	0.2	1.5	0.4		
NAFTA	53.0	50.1	33.2	16.8	32.2	18.2	32.0	17.2		
ROW	12.1	13.6	8.6	4.0	4.7	4.2	5.3	6.1		

Source : COMTRADE & Bank of Guatemala statistics

a/ From 200 to 2003 "EU" includes EU-15 members. For 2004 It considers the new members countries: Cyprus, Estonia Czech Republic, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia

b/ "Other east Asian" includes the Association of Southeast Asian Nations(ASEAN4: Indonesia, the Philippines, Thailand and Malaysia), and Newly Industrializing Economies 4(NIEs4: Taiwan, Korea, Hong Kong and Singapore)

* / Share of total country's imports in semi-finished products

Table 9: Guatemalan imports in semi-finished products, by major partners.

Partner	Imports (value in thousands \$)									
	2000		2001		2002		2003		2004	
	C.Trade	C.Trade	C.Trade	FTA+D2989	C.Trade	FTA+D2989	C.Trade	FTA+D2989		
CHN	15618	25515	58286	45244	50518	79055	39273	105419		
CRI	54383	72944	85401	3456	88011	5472	91554	5534		
DEU	49497	50259	65341	2042	63840	4626	62339	6250		
HKG	2028	4407	10816	52957	13765	71109	16365	107532		
HND	27651	43181	37008	10268	39636	13832	44989	20498		
KOR	9251	16147	36385	427113	27506	420343	24213	440166		
MEX	235691	234133	253796	33960	249411	37264	290918	45256		
PAN	19672	14506	40685	37002	58377	32632	84094	40422		
SLV	88201	129890	122364	18458	111781	14271	128800	18220		
USA	496322	581801	914946	559474	802065	559069	959499	630298		
Share (%) ^{*/}										
CHN	1.1	1.5	1.6	1.3	1.5	2.4	1.0	2.7		
CRI	3.9	4.4	2.4	0.1	2.7	0.2	2.3	0.1		
DEU	3.5	3.0	1.8	0.1	1.9	0.1	1.6	0.2		
HKG	0.1	0.3	0.3	1.5	0.4	2.2	0.4	2.7		
HND	2.0	2.6	1.0	0.3	1.2	0.4	1.1	0.5		
KOR	0.7	1.0	1.0	12.0	0.8	12.8	0.6	11.1		
MEX	16.7	14.1	7.1	1.0	7.6	1.1	7.4	1.1		
PAN	1.4	0.9	1.1	1.0	1.8	1.0	2.1	1.0		
SLV	6.3	7.8	3.4	0.5	3.4	0.4	3.3	0.5		
USA	35.3	35.0	25.8	15.8	24.4	17.0	24.3	16.0		

Source : COMTRADE & Bank of Guatemala statistics

* / Share of total country's imports in semi-finished products

Table 10: Guatemalan exports in semi-finished products, by economic blocs.

Block Partner	Exports (value in thousands \$)									
	2000		2001		2002		2003		2004	
	C.Trade	C.Trade	C.Trade	FTA+D2989	C.Trade	FTA+D2989	C.Trade	FTA+D2989	C.Trade	FTA+D2989
JAPAN	8	4	241	278	3	0	553	0		
CAN	7445	4280	13878	766	2288	677	5344	3211		
CHINA	2931	22	4553	79	3272	157	18652	124		
OTHER EAST ASIAN ^{b/}	32790	104055	99225	227	75723	2123	45399	942		
EU ^{a/}	6350	3570	2380	1702	2656	2815	3250	2653		
CACM	263596	368494	203174	49586	365209	62195	432784	83601		
MERCOSUR	621	218	60	61	263	58	377	167		
NAFTA	164038	119136	104630	90279	133260	79965	183286	103024		
ROW	121338	79077	91199	13307	109518	19566	74034	19380		
Share (%) ^{*/}										
JAPAN	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0		
CAN	1.2	0.6	2.1	0.1	0.3	0.1	0.5	0.3		
CHINA	0.5	0.0	0.7	0.0	0.4	0.0	1.9	0.0		
OTHER EAST ASIAN ^{b/}	5.5	15.3	14.7	0.0	8.8	0.2	4.6	0.1		
EU ^{a/}	1.1	0.5	0.4	0.3	0.3	0.3	0.3	0.3		
CACM	44.0	54.3	30.1	7.3	42.5	7.2	44.3	8.6		
MERCOSUR	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
NAFTA	27.4	17.5	15.5	13.4	15.5	9.3	18.8	10.5		
ROW	20.3	11.6	13.5	2.0	12.7	2.3	7.6	2.0		

Source : COMTRADE & Bank of Guatemala statistics

a/ From 200 to 2003 "EU" includes EU-15 members. For 2004 It considers the new members countries: Cyprus, Estonia Czech Republic, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia

b/ "Other east Asian" includes the Association of Southeast Asian Nations(ASEAN4: Indonesia, the Philippines, Thailand and Malaysia), and Newly Industrializing Economies 4(NIEs4: Taiwan, Korea, Hong Kong and Singapore)

*/ Share of total country's exports in semi-finished products

Table 11: Guatemalan exports in semi-finished products, by major partners.

Partner	2000		2001		2002		2003		2004	
	C.Trade	C.Trade	C.Trade	FTA+D2989	C.Trade	FTA+D2989	C.Trade	FTA+D2989	C.Trade	FTA+D2989
BLZ	6655	7288	6413	2171	14844	2051	15353	2338		
CAN	40397	22274	16143	281	15002	166	18163	347		
CRI	28265	39475	16063	3067	42493	3266	53223	3927		
HND	76187	108307	61966	15121	106340	18020	135457	26858		
KOR	28215	93635	85276	93	59186	162	33446	389		
MEX	28295	22364	26785	20557	43470	18481	61277	31441		
NIC	40347	48789	23511	3814	46813	6810	54574	6100		
RUS	20616	31321	18858	0	46136	0	11571	0		
SLV	118798	171923	101635	27584	169564	34098	189530	46716		
USA	95346	74497	61703	69440	74787	61318	103846	71236		
Share (%) ^{*/}										
BLZ	1.1	1.1	0.9	0.3	1.7	0.2	1.6	0.2		
CAN	6.7	3.3	2.4	0.0	1.7	0.0	1.9	0.0		
CRI	4.7	5.8	2.4	0.5	4.9	0.4	5.4	0.4		
HND	12.7	16.0	9.2	2.2	12.4	2.1	13.9	2.7		
KOR	4.7	13.8	12.6	0.0	6.9	0.0	3.4	0.0		
MEX	4.7	3.3	4.0	3.0	5.1	2.1	6.3	3.2		
NIC	6.7	7.2	3.5	0.6	5.4	0.8	5.6	0.6		
RUS	3.4	4.6	2.8	0.0	5.4	0.0	1.2	0.0		
SLV	19.8	25.3	15.0	4.1	19.7	4.0	19.4	4.8		
USA	15.9	11.0	9.1	10.3	8.7	7.1	10.6	7.3		

Source : COMTRADE & Bank of Guatemala statistics

*/ Share of total country's exports in semi-finished products

Table 12: Nicaraguan imports in intermediate goods, by economic blocs.

Block Partner	Imports (value in thousands \$)									
	P&C					Semi_Finished				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
JAPAN	708	600	635	866	1103	1316	663	353	299	325
CAN	17	18	30	32	16	752	1074	346	198	635
CHINA	63	169	261	656	1105	206	454	750	1273	1543
OTHER EAST ASIAN ^{b/}	302	363	626	1013	772	764	621	1463	1534	1336
EU ^{a/}	929	2162	1512	1534	1203	2128	2236	1980	2555	3237
CACM	883	824	587	382	406	16948	15517	14756	15608	18379
MERCOSUR	168	263	170	354	460	434	556	1096	1536	2474
NAFTA	3950	4069	4039	3398	3899	10622	12053	12143	14554	16128
ROW	864	832	538	373	465	3757	4934	3074	3260	5392
Shares (%)										
JAPAN	9.0	6.5	7.6	10.1	11.7	3.6	1.7	1.0	0.7	0.7
CAN	0.2	0.2	0.4	0.4	0.2	2.0	2.8	1.0	0.5	1.3
CHINA	0.8	1.8	3.1	7.6	11.7	0.6	1.2	2.1	3.1	3.1
OTHER EAST ASIAN ^{b/}	3.8	3.9	7.5	11.8	8.2	2.1	1.6	4.1	3.8	2.7
EU ^{a/}	11.8	23.2	18.0	17.8	12.8	5.8	5.9	5.5	6.3	6.5
CACM	11.2	8.9	7.0	4.4	4.3	45.9	40.7	41.0	38.2	37.2
MERCOSUR	2.1	2.8	2.0	4.1	4.9	1.2	1.5	3.0	3.8	5.0
NAFTA	50.1	43.8	48.1	39.5	41.4	28.8	31.6	33.8	35.7	32.6
ROW	11.0	8.9	6.4	4.3	4.9	10.2	12.9	8.5	8.0	10.9

a/ From 200 to 2003 "EU" includes EU-15 members. For 2004 it considers the new members countries: Cyprus, Estonia Czech Republic, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia

b/ "Other east Asian" includes the Association of Southeast Asian Nations(ASEAN4: Indonesia, the Philippines, Thailand and Malaysia), and Newly Industrializing Economies 4(NIEs4: Taiwan, Korea, Hong Kong and Singapore)

*/ Share of total country's imports in parts and components/semi-finished products

Table 13: Nicaraguan imports in intermediate goods, by major partners.

Partner	Imports (value in thousands \$)									
	P&C					Semi finished				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Brazil	163	252	156	345	447	303	520	993	1396	1566
China	63	169	261	656	1105	206	454	750	1273	1543
Costa Rica	447	453	197	180	197	9046	7715	7319	7756	8946
Germany	522	1039	474	582	530	492	612	458	695	799
Guatemala						4086	4410	4259	4537	5479
Spain	190	627	183	181	270					
Japan	708	600	635	866	1103	1316	663	353	299	325
Mexico	182	169	330	350	499	2297	2261	2300	2531	3581
Panama	673	302	263	18	11	963	748	742	471	290
Sweden	40	234	635	504	73					
El Salvador						3293	3024	3056	2476	3953
USA	3624	3747	3602	2940	3247	7910	9267	9285	11542	11961
Shares (%)										
Brazil	2.1	2.7	1.9	4.0	4.7	0.8	1.4	2.8	3.4	3.2
China	0.8	1.8	3.1	7.6	11.7	0.6	1.2	2.1	3.1	3.1
Costa Rica	5.7	4.9	2.3	2.1	2.1	24.5	20.2	20.4	19.0	18.1
Germany	6.6	11.2	5.6	6.8	5.6	1.3	1.6	1.3	1.7	1.6
Guatemala	0.0	0.0	0.0	0.0	0.0	11.1	11.6	11.8	11.1	11.1
Spain	2.4	6.7	2.2	2.1	2.9					
Japan	9.0	6.5	7.6	10.1	11.7	3.6	1.7	1.0	0.7	0.7
Mexico	2.3	1.8	3.9	4.1	5.3	6.2	5.9	6.4	6.2	7.2
Panama	8.5	3.2	3.1	0.2	0.1	2.6	2.0	2.1	1.2	0.6
Sweden	0.5	2.5	7.6	5.9	0.8					
El Salvador	0.0	0.0	0.0	0.0	0.0	8.9	7.9	8.5	6.1	8.0
USA,	46.0	40.3	42.9	34.1	34.4	21.4	24.3	25.8	28.3	24.2

Source: COMTRADE statistics

*/ Share of total country's imports in parts and components/semi-finished products

Table 14: Nicaraguan exports in intermediate goods, by economic blocs.

Block Partner	Exports (value in thousands \$)									
	Semi-Finished					P&C				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
JAPAN		4		1	0					1
CAN	30	583	2407	8	71	8	6	28	2	1
CHINA		311	75	18	923			5		
OTHER EAST ASIAN ^b	1260	540	15	647	1891	6		1		4
EU ^{a/}	643	2076	3025	2111	2040	7	177	499	60	101
CACM	26378	33506	40248	36504	38469	213	356	2550	900	942
MERCOSUR	53		4		0	9	19	30		
NAFTA	36864	44666	60986	54148	79092	300	364	825	324	900
ROW	4265	17399	22601	6899	7377	9	55	4546	196	247
	Shares (%) ^{*/}									
JAPAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAN	0.0	0.6	1.9	0.0	0.1	1.5	0.6	0.3	0.1	0.0
CHINA	0.0	0.3	0.1	0.0	0.7	0.0	0.0	0.1	0.0	0.0
OTHER EAST ASIAN ^b	1.8	0.5	0.0	0.6	1.5	1.1	0.0	0.0	0.0	0.2
EU ^{a/}	0.9	2.1	2.3	2.1	1.6	1.3	18.1	5.9	4.0	4.6
CACM	38.0	33.8	31.1	36.4	29.6	38.6	36.4	30.1	60.8	42.9
MERCOSUR	0.1	0.0	0.0	0.0	0.0	1.6	1.9	0.4	0.0	0.0
NAFTA	53.0	45.1	47.1	54.0	60.9	54.4	37.3	9.7	21.9	41.0
ROW	6.1	17.6	17.5	6.9	5.7	1.6	5.7	53.6	13.2	11.3

a/ From 200 to 2003 "EU" includes EU-15 members. For 2004 It considers the new members countries: Cyprus, Estonia Czech Republic, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia

b/ "Other east Asian" includes the Association of Southeast Asian Nations(ASEAN4: Indonesia, the Philippines, Thailand and Malaysia), and Newly Industrializing Economies 4(NIEs4: Taiwan, Korea, Hong Kong and Singapore)

*/ Share of total country's exports in parts and components/semi-finished products

Table 15: Nicaraguan exports in parts and components, by major partners.

Partner	Semi-finished					Partner	P&C				
	2000	2001	2002	2003	2004		2000	2001	2002	2003	2004
Canada	19020	18293	24307	17011	24735	Costa Rica	22	67	143	159	232
Switz.Liecht	6	8	1577	2714	3398	Germany		166	345	30	69
Costa Rica	11075	11464	13879	12539	13573	Guatemala	28	136	868	135	200
Guatemala	4985	5630	6612	5932	7580	Honduras	67	36	1102	87	94
Honduras	5415	7243	10795	9372	9630	Italy	5		148		
Italy	420	1650	1749	1992	1774	Mexico	8	125		1	14
Panama	529	1657	10005	1031	729	Panama	2	12	4364	35	27
Russian		13363	6201	1399	1	El Salvador	96	117	438	519	416
El Salvador	4902	9168	8962	8660	7686	Areas nes	7	17	11	23	211
United States	17430	25904	36156	35942	52936	United States	292	238	819	319	820
Canada	27.4	18.5	18.8	17.0	19.0	Costa Rica	4.0	6.9	1.7	10.8	10.6
Switz.Liecht	0.0	0.0	1.2	2.7	2.6	Germany	0.0	17.0	4.1	2.1	3.1
Costa Rica	15.9	11.6	10.7	12.5	10.5	Guatemala	5.0	13.9	10.2	9.1	9.1
Guatemala	7.2	5.7	5.1	5.9	5.8	Honduras	12.1	3.7	13.0	5.9	4.3
Honduras	7.8	7.3	8.3	9.3	7.4	Italy	0.9	0.0	1.7	0.0	0.0
Italy	0.6	1.7	1.4	2.0	1.4	Mexico	1.5	12.8	0.0	0.1	0.6
Panama	0.8	1.7	7.7	1.0	0.6	Panama	0.4	1.2	51.4	2.4	1.2
Russian	0.0	13.5	4.8	1.4	0.0	El Salvador	17.5	12.0	5.2	35.0	19.0
El Salvador	7.1	9.3	6.9	8.6	5.9	Areas nes	1.2	1.8	0.1	1.5	9.6
United States	25.1	26.1	27.9	35.8	40.8	United States	52.9	24.4	9.7	21.5	37.4

Source: COMTRADE statistics

*/ Share of total country's exports in parts and components/semi-finished products

Table 16: Brazil: Relative importance of selected imports in parts and components.

SITC3	Description	Trade Balance										Imports (thousand \$)										Shares														
		2000					2001					2002					2003					2004					Imports in parts and components					Total imports				
		2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004										
69564	Interchangeable tools for hand tools, whether or not power-operated	-86.2	-142.8	-167.4	9.3	17.8	70578	113184	103515	57980	58694	0.58	0.96	1.06	0.56	0.4	0.16	0.26	0.29	0.16	0.13															
71322	Reciprocating piston engines of a cylinder capacity exceeding 1 litre	-101.3	37.5	46.8	72.4	78.8	218553	173025	184350	126105	111490	1.79	1.47	1.89	1.22	0.8	0.48	0.39	0.51	0.35	0.24															
71323	Compression-ignition engines (diesel or semi-diesel engines)	7.1	22.3	59.0	59.9	36.6	169228	134154	105894	147559	223473	1.39	1.14	1.09	1.43	1.7	0.37	0.31	0.30	0.41	0.49															
71391	Parts, n.e.s., for the internal combustion piston engines of road vehicles, tractors, work trucks and armoured fighting vehicles suitable for use solely or principally with spark-ignition internal combustion engines	47.0	30.9	36.7	38.4	12.2	213866	243819	255799	252944	327253	1.75	2.07	2.62	2.45	2.4	0.47	0.56	0.71	0.70	0.72															
71392	Parts, n.e.s., for the internal combustion piston engines of road vehicles, tractors, work trucks and armoured fighting vehicles suitable for use solely or principally with compression-ignition engines	41.3	33.1	42.6	45.8	71.1	216254	192915	187857	237039	207058	1.77	1.64	1.93	2.30	1.5	0.48	0.44	0.52	0.66	0.45															
72399	Other parts for the machinery of group 723 (excluding heading 723.99)	-67.5	-183.0	-121.2	-79.1	-95.3	84449	94573	90609	106613	179722	0.69	0.80	0.93	1.03	1.3	0.19	0.22	0.25	0.30	0.39															
74822	Bearing housings, not incorporating ball- or roller bearings; plain bearings	31.0	10.3	20.9	17.4	38.9	32332	37655	35347	43434	44316	0.27	0.32	0.36	0.42	0.3	0.07	0.09	0.10	0.12	0.10															
76211	Radio-broadcast receivers not capable of operating without an external antenna	88.3	78.8	68.1	70.6	54.2	24518	28409	31063	31305	33971	0.20	0.24	0.32	0.30	0.3	0.05	0.06	0.09	0.09	0.07															
76491	Parts and accessories suitable...with the apparatus of line telephones	-583.7	-415.8	-55.5	-97.6	-125.7	491891	441211	96092	118289	181879	4.04	3.75	0.99	1.15	1.3	1.08	1.00	0.27	0.33	0.40															
76493	Parts and accessories suitable....with the apparatus and equipment of telephones	-705.6	-335.3	-327.7	-633.5	-688.1	973114	716593	613377	781603	1249555	7.98	6.08	6.29	7.57	9.3	2.14	1.63	1.71	2.17	2.74															
77611	Television picture tubes, cathode-ray....colour	-9.1	-33.5	-14.5	2.3	-107.7	144948	133315	118889	119396	227670	1.19	1.13	1.22	1.16	1.7	0.32	0.30	0.33	0.33	0.50															
77812	Electric accumulators (storage batteries)	-194.1	-77.2	-101.8	-84.1	-102.6	122071	97060	77561	103042	172190	1.00	0.82	0.80	1.00	1.3	0.27	0.22	0.22	0.29	0.38															
77831	Electrical ignition or starting equipment of a kind used for spark-ignition engines	-70.1	-76.5	-51.8	-43.4	-28.2	93112	90956	78649	87673	93485	0.76	0.77	0.81	0.85	0.7	0.20	0.21	0.22	0.24	0.21															
78425	Bodies (including cabs), for the motor vehicles of cars, tractors, trucks and other motor vehicles for transport of goods	86.9	88.2	97.2	98.3	94.0	23676	21377	4464	3193	13869	0.19	0.18	0.05	0.03	0.1	0.05	0.05	0.01	0.01	0.03															
78432	Other parts and accessories of bodies (including cabs)	-292.5	-254.4	-315.8	-184.9	-99.5	372153	387527	405937	385547	437181	3.05	3.29	4.16	3.73	3.2	0.82	0.88	1.13	1.07	0.96															
78433	Brakes and servo-brakes and parts thereof	37.4	34.6	46.3	49.4	53.3	93271	88710	80550	105686	149022	0.77	0.75	0.83	1.02	1.1	0.21	0.20	0.22	0.29	0.33															
78434	Gearboxes	-117.7	-71.5	-84.8	-100.9	-88.4	242154	220897	211077	250031	407009	1.99	1.87	2.16	2.42	3.0	0.53	0.50	0.59	0.69	0.89															
78435	Drive-axles with differential, whether or not provided with other parts	47.9	19.6	32.1	11.0	-2.1	47328	49595	44888	64512	89474	0.39	0.42	0.46	0.62	0.7	0.10	0.11	0.13	0.18	0.20															
78439	Other parts and accessories of the motor vehicles (cars, tractors, trucks and other motor vehicles)	-14.7	-5.8	7.8	21.4	29.2	840914	745680	656897	720923	766937	6.90	6.33	6.74	6.98	5.7	1.85	1.70	1.83	2.00	1.68															
79295	Other parts of aeroplanes or helicopters	-423.8	-311.0	-536.8	-692.2	-977.1	636119	701277	483867	492847	770798	5.22	5.95	4.96	4.77	5.7	1.40	1.60	1.35	1.37	1.69															
	All above items											41.9	40.0	39.7	41.0	42.6	11.24	10.73	10.78	11.76	12.60															

Source : COMTRADE Statistics

Elab : Authors

Table 17: Brazil: Relative importance of selected exports in parts and components

SITC3	Description	Exports (value in thousand \$)					Shares (%)									
							Total exports in P&C					Total exports				
		2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
69564	Interchangeable tools for hand tools, whether or not power-operated, or for	37894	46610	38716	63919	71408	0.8	1.0	0.9	1.2	1.1	0.1	0.1	0.1	0.1	0.1
71322	Reciprocating piston engines of a cylinder capacity exceeding 1,000 cc	108598	276876	346502	456628	526329	2.4	6.1	7.7	8.5	7.8	0.3	0.8	0.9	1.0	0.9
71323	Compression-ignition engines (diesel or semi-diesel engines)	182258	172669	258435	367928	352586	4.0	3.8	5.7	6.9	5.2	0.5	0.5	0.7	0.8	0.6
71391	Parts, n.e.s, for the internal combustion piston engines of road vehicles, tractors, work trucks and armoured fighting vehicles suitable for use solely or principally with spark-ignition internal combustion	403691	352784	403905	410876	372697	8.9	7.8	9.0	7.7	5.5	1.1	1.0	1.1	0.9	0.6
71392	Parts, n.e.s, for the internal combustion piston engines of road vehicles, tractors, work trucks and armoured fighting vehicles suitable for use solely or principally with compression-ignition	368187	288254	327300	437474	715869	8.1	6.3	7.3	8.2	10.6	1.0	0.8	0.9	1.0	1.2
72399	Other parts for the machinery of group 723 (excluding heading 723.48) and c	50408	33422	40970	59525	92044	1.1	0.7	0.9	1.1	1.4	0.1	0.1	0.1	0.1	0.2
74822	Bearing housings, not incorporating ball- or roller bearings; plain shaft b	46838	41988	44691	52559	72577	1.0	0.9	1.0	1.0	1.1	0.1	0.1	0.1	0.1	0.1
76211	Radio-broadcast receivers not capable of operating without an external sour	209032	133935	97520	106416	74117	4.6	2.9	2.2	2.0	1.1	0.6	0.4	0.3	0.2	0.1
76491	Parts and accessories suitable..with the apparatus of line telephony and tele	71947	85531	61789	59863	80583	1.6	1.9	1.4	1.1	1.2	0.2	0.2	0.2	0.1	0.1
76493	Parts and accessories suitable....with the apparatus and equipment of group	120800	164636	143407	106561	158558	2.7	3.6	3.2	2.0	2.4	0.3	0.4	0.4	0.2	0.3
77611	Television picture tubes, cathode-ray....colour	132892	99896	103813	122150	109604	2.9	2.2	2.3	2.3	1.6	0.4	0.3	0.3	0.3	0.2
77812	Electric accumulators (storage batteries)	41506	54765	38442	55976	85004	0.9	1.2	0.9	1.0	1.3	0.1	0.2	0.1	0.1	0.1
77831	Electrical ignition or starting equipment of a kind used for spark- ignition	54729	51538	51814	61151	72906	1.2	1.1	1.2	1.1	1.1	0.2	0.1	0.1	0.1	0.1
78425	Bodies (including cabs), for the motor vehicles of cars, tractors, vehicles for transport of goods	180249	181070	158960	183166	231804	4.0	4.0	3.5		3.4	0.5	0.5	0.4	0.4	0.4
78432	Other parts and accessories of bodies (including cabs)	94808	109351	97622	135329	219180	2.1	2.4	2.2	2.5	3.3	0.3	0.3	0.3	0.3	0.4
78433	Brakes and servo-brakes and parts thereof	149115	135612	150086	209040	319062	3.3	3.0	3.3	3.9	4.7	0.4	0.4	0.4	0.5	0.5
78434	Gearboxes	111245	128769	114215	124478	216013	2.4	2.8	2.5	2.3	3.2	0.3	0.4	0.3	0.3	0.4
78435	Drive-axes with differential, whether or not provided with other transmission	90863	61692	66152	72474	87597	2.0	1.4	1.5	1.4	1.3	0.3	0.2	0.2	0.2	0.1
78439	Other parts and accessories of the motor vehicles (cars, tractors and vehicle	733352	704699	712486	917483	1082556	16.1	15.5	15.8	17.1	16.1	2.0	1.9	1.9	2.0	1.8
79295	Other parts of aeroplanes or helicopters	121445	170643	75981	62216	71562	2.7	3.8	1.7	1.2	1.1	0.3	0.5	0.2	0.1	0.1
	All Above items						72.8	72.4	74.0	72.4	74.5	9.15	8.91	8.82	8.88	8.27

Source : Author's calculations based on COMTRADE databases

Table 18: Argentina: Relative importance of selected imports in parts and components

SITC3	Description	Trade Balance					Imports (thousand \$)					Shares									
												Total Imports in parts and components					Total Imports				
		2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
69564	Interchangeable tools for hand tools, whether or not power-operated	-289	-25	41	-34	-155	47194	32260	14860	11025	51720	1.3	1.1	1.2	0.6	1.7	0.26	0.21	0.22	0.11	0.2
71322	Reciprocating piston engines of a cylinder capacity exceeding 1,000 cc	-492	-1157	-34526	-5874	-550	99784	73229	55014	60918	104818	2.7	2.5	4.3	3.3	3.4	0.55	0.47	0.82	0.59	0.4
71323	Compression-ignition engines (diesel or semi-diesel engines)	-2	-113	-22	-44	-128	104911	89456	43228	74411	176229	2.9	3.0	3.3	4.0	5.7	0.57	0.57	0.65	0.72	0.67
71391	Parts, n.e.s., for the internal combustion piston engines of road vehicles, tractors, work trucks and armoured fighting vehicles suitable for use solely or principally with spark-ignition internal combustion	-4	48	62	49	14	50023	29771	21874	27698	50746	1.4	1.0	1.7	1.5	1.6	0.27	0.19	0.33	0.27	0.19
71392	Parts, n.e.s., for the internal combustion piston engines of road vehicles, tractors, work trucks and armoured fighting vehicles suitable for use solely or principally with compression-ignition	-174	-97	-31	-79	-72	95929	70388	37535	58693	83097	2.6	2.4	2.9	3.2	2.7	0.52	0.45	0.56	0.57	0.32
71819	Parts, including regulators, of hydraulic turbines and water-wheels	93	96	97	96	92	997	462	701	57	203	0.0	0.0	0.1	0.0	0.0	0.01	0	0.01	0	0
73729	Rolls and other parts for metal-rolling mills	0.1	4	25	-8	12	9272	8376	7281	10462	11019	0.3	0.3	0.6	0.6	0.4	0.05	0.05	0.11	0.1	0.04
74149	Parts of refrigerators, freezers and other refrigerating or freezing equipment	-55	-96	33	54	24	13737	12971	6531	7360	12341	0.4	0.4	0.5	0.4	0.4	0.08	0.08	0.1	0.07	0.05
74291	Parts of the...of pumps	-60	-55	-15	-54	-31	23607	28537	15608	26534	29832	0.6	1.0	1.2	1.4	1.0	0.13	0.18	0.23	0.26	0.11
75997	Parts and accessories for Calculating machines; accounting machines	-2050	-1917	-433	-1847	-3479	280041	245672	61942	133530	212610	7.7	8.3	4.8	7.2	6.8	1.53	1.57	0.93	1.29	0.81
76211	Radio-broadcast receivers not capable of operating without an external source incorporating sound-recording or reproducing apparatus	-140	-133	45	42	21	23399	20918	6113	11660	23089	0.6	0.7	0.5	0.6	0.7	0.13	0.13	0.09	0.11	0.09
77261	Boards, panels (including numerical control panels)...for a voltage	-306	-24	-14	-89	-205	40289	28576	13689	15054	25029	1.1	1.0	1.1	0.8	0.8	0.22	0.18	0.21	0.15	0.1
77831	Electrical ignition or starting equipment of a kind used for spark-ignition engines	-374	-248	-98	-113	-136	53373	36537	18684	26972	36309	1.5	1.2	1.4	1.5	1.2	0.29	0.23	0.28	0.26	0.14
77833	Parts of electrical ignition or starting equipments	61	67	90	85	85	6160	4788	1452	2102	2917	0.2	0.2	0.1	0.1	0.1	0.03	0.03	0.02	0.02	0.01
77834	Electrical lighting or signalling equipment (excluding Electric filament lamps)	-132	-84	23	-22	-112	34006	25438	10098	15240	30035	0.9	0.9	0.8	0.8	1.0	0.19	0.16	0.15	0.15	0.11
78432	Other parts and accessories of bodies (including cabs)	-982	-668	-173	-235	-289	355836	273834	144731	175094	290162	9.7	9.3	11.2	9.5	9.3	1.94	1.75	2.17	1.69	1.1
78433	Brakes and servo-brakes and parts thereof	-343	-237	-64	-42	-90	61212	47427	21079	27444	50735	1.7	1.6	1.6	1.5	1.6	0.33	0.3	0.32	0.26	0.19
78434	Gearboxes	55	49	70	67	51	119987	92196	57275	68344	124817	3.3	3.1	4.4	3.7	4.0	0.66	0.59	0.86	0.66	0.48
78435	Drive-axes with differential, whether or not provided with other transmission parts	-638	-229	-39	-2	-16	53728	40746	28253	31816	55126	1.5	1.4	2.2	1.7	1.8	0.29	0.26	0.42	0.31	0.21
78439	Other parts and accessories...of the motor vehicles 5tractors , motor cars, vehicles for transport of goods	-126	-71	-20	-31	-62	403904	290018	174079	236272	398742	11.1	9.8	13.5	12.8	12.8	2.21	1.85	2.61	2.28	1.52
	All above items											51.4	49.0	57.3	55.3	56.9	9.77	9.25	11.09	20.34	6.74

Source : COMTRADE Statistics

Elab : Authors

Table 19: Argentina: Relative importance of selected exports in parts and components

SITC3	Description	Exports (value in thousands \$)					shares									
							Total exports in P&C					Total exports				
		2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
69564	Interchangeable tools for hand tools, whether or not power-operated, or for machine tools	12142	25857	25264	8234	20286	1.2	2.9	2.9	0.9	1.7	0.08	0.17	0.18	0.05	0.1
71322	Reciprocating piston engines of a cylinder capacity exceeding 1,000 cc	16845	5824	159	1020	16115	1.6	0.6	0.0	0.1	1.3	0.11	0.04	0	0.01	0.08
71323	Compression-ignition engines (diesel or semi-diesel engines)	103027	42008	35578	51613	77189	9.9	4.7	4.1	5.7	6.4	0.66	0.27	0.25	0.31	0.39
71391	Parts, n.e.s. for the internal combustion piston engines of road vehicles, tractors, work trucks and armoured fighting vehicles suitable for use solely or principally with spark-ignition internal combustion	47942	57732	57261	54600	58975	4.6	6.4	6.7	6.1	4.9	0.31	0.38	0.4	0.33	0.3
71392	Parts, n.e.s. for the internal combustion piston engines of road vehicles, tractors, work trucks and armoured fighting vehicles suitable for use solely or principally with compression-ignition	35068	35774	28580	32708	48231	3.4	4.0	3.3	3.6	4.0	0.22	0.23	0.2	0.2	0.25
71819	Parts, including regulators, of hydraulic turbines and water-wheels	15287	13011	20501	1467	2580	1.5	1.4	2.4	0.2	0.2	0.1	0.09	0.14	0.01	0.01
73729	Rolls and other parts for metal-rolling mills	9280	8747	9681	9660	12469	0.9	1.0	1.1	1.1	1.0	0.06	0.06	0.07	0.06	0.06
74149	Parts of refrigerators, freezers and other refrigerating or freezing equipm	8883	6609	9820	15849	16141	0.9	0.7	1.1	1.8	1.3	0.06	0.04	0.07	0.1	0.08
74291	Parts of the...of pumps	14714	18406	13527	17239	22804	1.4	2.0	1.6	1.9	1.9	0.09	0.12	0.09	0.1	0.12
75997	Parts and accessories for Calculating machines; accounting machines, postage-frankin	13027	12180	11619	6860	5940	1.3	1.3	1.4	0.8	0.5	0.08	0.08	0.08	0.04	0.03
76211	Radio-broadcast receivers not capable of operating without an external source incorporating sound-recording or reproducing apparatus	9746	8975	11132	20114	29300	0.9	1.0	1.3	2.2	2.4	0.06	0.06	0.08	0.12	0.15
77261	Boards, panels (including numerical control panels)...for a voltage not exceeding 1,000	9928	23115	12011	7977	8196	1.0	2.6	1.4	0.9	0.7	0.06	0.15	0.08	0.05	0.04
77831	Electrical ignition or starting equipment of a kind used for spark- ignition	11252	10509	9445	12667	15375	1.1	1.2	1.1	1.4	1.3	0.07	0.07	0.07	0.08	0.08
77833	Parts of electrical ignition or starting equipments	15917	14452	14611	13618	18915	1.5	1.6	1.7	1.5	1.6	0.1	0.09	0.1	0.08	0.1
77834	Electrical lighting or signalling equipment (excluding Electric filament or discharge lamps	14673	13797	13127	12463	14158	1.4	1.5	1.5	1.4	1.2	0.09	0.09	0.09	0.08	0.07
78432	Other parts and accessories of bodies (including cabs)	32884	35637	52978	52271	74602	3.2	3.9	6.2	5.8	6.2	0.21	0.23	0.37	0.32	0.38
78433	Brakes and servo-brakes and parts thereof	13811	14066	12840	19279	26665	1.3	1.6	1.5	2.1	2.2	0.09	0.09	0.09	0.12	0.14
78434	Gearboxes	266452	182543	191307	208430	254922	25.7	20.2	22.3	23.1	21.2	1.7	1.19	1.33	1.26	1.3
78435	Drive-axes with differential, whether or not provided with other transmission	7277	12388	20302	31099	47532	0.7	1.4	2.4	3.4	3.9	0.05	0.08	0.14	0.19	0.24
78439	Other parts and accessories..of the motor vehicles (tractors , motor cars, vehicles for transport of goods)	178582	169379	145459	179968	246020	17.2	18.8	17.0	19.9	20.4	1.14	1.11	1.01	1.09	1.25
All above items							80.6	78.8	81.1	83.9	84.4	5.34	4.64	9.98	4.6	5.17

Source : COMTRADE Statistics

Elab : Authors

Table 20: Guatemala: Relative importance of selected imports in semi-finished products, by special regime.

SITC3	Description	Imports (thousand \$)			Trade Balance			Shares (%)					
								Total Imports *			Imp in Semi-finished		
		2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
33411	Motor spirit (gasoline), including aviation spirit	19130	47315	62607	-732	-415	-557	0.2	0.6	0.7	1.0	2.0	1.9
42111	Crude oil, whether or not degummed	8706	21294	39406			-22776	0.1	0.3	0.4	0.5	0.9	1.2
64141	Kraft paper	17327	17055	27227	-933457	-7969591	-226793	0.2	0.2	0.3	0.9	0.7	0.8
65133	Cotton yarn,....containing 85% or more by weight of cotton, not put up for	53231	57251	113664	-1625	-1170	-1854	0.7	0.7	1.2	2.8	2.4	3.5
65232	Other woven fabrics, containing 85% or more by weight of cotton(weighing no	50289	59913	66097	-807	-797	-400	0.7	0.7	0.7	2.7	2.5	2.0
65242	Other woven fabrics, containing 85% or more by weight of cotton(weighth more	28330	21626	30126	-427	-418	-650	0.4	0.3	0.3	1.5	0.9	0.9
65243	Other woven fabrics, containing 85% or more by weight of cotton(weighth more	59862	84785	46065	-6152	-6539	-2924	0.8	1.0	0.5	3.2	3.5	1.4
65254	Other woven fabrics, containing less than 85% by weight of cotton(weighth mo	10750	13106	33752	-5474	-7550	-82374	0.1	0.2	0.4	0.6	0.5	1.0
65292	Other woven fabrics of cotton..dyed, weighing not more than 200 g/m2	43340	19460	83551	-452	-138	-484	0.6	0.2	0.9	2.3	0.8	2.6
65311	Fabrics, woven, of synthetic filament yarnobtained from high tenacity	266183	264	27	-12398	-8	90	3.5	0.0	0.0	14.2	0.0	0.0
65315	..other,Fabrics, woven.. containing 85% or more by weight of textured polye	14261	24137	29586	-333	-648	-717	0.2	0.3	0.3	0.8	1.0	0.9
65317	..other Fabrics, woven..., containing 85% or more by weight of synthetic fil	37215	41556	40173	-14486	-5272	-2679	0.5	0.5	0.4	2.0	1.7	1.2
65331	Fabrics, woven, of synthetic staple fibres, containing less than 85%...of a	24920	26962	24378	-1592	-4086	-2162	0.3	0.3	0.3	1.3	1.1	0.8
65342	Fabrics, woven, of synthetic staple fibres, containing less than 85% by wei	18451	18601	31078	-34663	-15067	-78894	0.2	0.2	0.3	1.0	0.8	1.0
65343	Fabrics, woven, of synthetic staple fibres, containing less than 85% by wei	26099	33945	34158	-7909	-15816	-8186	0.3	0.4	0.4	1.4	1.4	1.1
65529	Knitted or crocheted fabrics, n.e.s.	62467	358974	412866	-266044	-10866	-6194	0.8	4.4	4.4	3.3	14.9	12.8
65621	Labels, badges and similar articles of textile materials....woven	22630	26627	29626	-3185	-1727	-922	0.3	0.3	0.3	1.2	1.1	0.9
65732	Textile fabrics impregnated, coated, covered or laminated with plastics, ot	15728	19373	22352	-1068	-493	-380	0.2	0.2	0.2	0.8	0.8	0.7
66729	Diamonds...otherwise worked, but not mounted or set	25891	14457	9353			-2326	0.3	0.2	0.1	1.4	0.6	0.3
89281	Paper or paperboard labels of all kinds, whether or not printed	22753	22781	25162	-1335	-1269	-1179	0.3	0.3	0.3	1.2	0.9	0.8
All above items								10.8	11.4	12.3	44.1	38.5	35.9

Source : Bank of Guatemala statistics

Elab: Authors

Table 21: Guatemala: Relative importance of selected imports in parts and components, by special regime.

SITC3	Description	Imports (thousand \$)			Trade Balance			Shares (%)					
								Total imports			Imports in P&C		
		2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
6251	Tyres, pneumatic, new, of a kind used on motor cars (including station wago	3841	2693	3550	8	-100	-48	0.1	0.0	0.0	14.6	9.5	8.6
6252	Tyres, pneumatic, new, of a kind used on buses or lorries	2005	4561	6006			-52	0.0	0.1	0.1	7.6	16.1	14.6
62551	Other new pneumatic tyres...having a "herring-bone" or similar tread	105	239	773	-539	-58	-56	0.0	0.0	0.0	0.4	0.8	1.9
62559	...other forms of new pneumatic tyres	3345	2682	5585	-403	-99	-65	0.0	0.0	0.1	12.7	9.4	13.6
62594	Solid or cushion tyres, interchangeable tyre treads and tyre flaps	262	304	412	-467	-123	-63	0.0	0.0	0.0	1.0	1.1	1.0
71392	Parts, n.e.s., for the internal combustion piston engines of subgroups 713.2	607	1028	669	-18	-142	53	0.0	0.0	0.0	2.3	3.6	1.6
71819	Parts, including regulators, of hydraulic turbines and water-wheels	1794	4	0				0.0	0.0	0.0	6.8	0.0	0.0
72439	Sewing-machine needles; furniture, bases and covers specially designed for	3558	3233	3486	-2149	-5432	-4907	0.0	0.0	0.0	13.5	11.4	8.5
72449	Parts and accessories of machines of subgroup 724.4 or heading 724.54 or of	486	865	983	-60648			0.0	0.0	0.0	1.9	3.0	2.4
72467	Parts and accessories of weaving machines (looms) of heading 724.51 or of t	408	605	224	-4971	-26045	-1828	0.0	0.0	0.0	1.6	2.1	0.5
72468	Parts and accessories of machines of headings 724.52 and 724.53 or of their	1181	1297	1730	-480	-233	-603	0.0	0.0	0.0	4.5	4.6	4.2
72492	Parts for the machines of subgroups 724.7 and 775.1 for the machines of hea	755	1021	1219		-120499	-28732	0.0	0.0	0.0	2.9	3.6	3.0
72729	Parts for the food-processing machinery of heading 727.22	233	237	698				0.0	0.0	0.0	0.9	0.8	1.7
72819	Parts and accessories suitable for use solely or principally with the machi	113	127	948				0.0	0.0	0.0	0.4	0.4	2.3
72852	Parts for the machines of heading 728.42	69	990	2224				0.0	0.0	0.0	0.3	3.5	5.4
72855	Parts, n.e.s., for the machines of headings 723.48, 727.21, 728.44, 728.46	284	137	680	-2335			0.0	0.0	0.0	1.1	0.5	1.7
74149	Parts of refrigerators, freezers and other refrigerating or freezing equipm	444	742	642	-2572	-15994		0.0	0.0	0.0	1.7	2.6	1.6
75997	Parts and accessories (other than covers, carrying cases and the like)...f	604	304	181	-33	-376	-169	0.0	0.0	0.0	2.3	1.1	0.4
77281	Boards, panels, consoles, desks, cabinets and other bases for the goods of	7	29	1796				0.0	0.0	0.0	0.0	0.1	4.4
78439	Other parts and accessories...of the motor vehicles of groups 722, 781, 782	194	416	313	61	-81	-102	0.0	0.0	0.0	0.7	1.5	0.8
All above items								0.3	0.3	0.3	77.3	75.8	78.1

Source : Bank of Guatemala statistics

Elab: Authors

Table 22: Nicaragua: Relative importance of selected imports in semi-finished products.

SITC	Item description	Shares (%)														
		Imports (Value in thousands \$)					Total imports					Imports in Semi-finished				
		2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
04711	Maize (corn) flour	6363	4473	4203	4020	4439	0,58	0,39	0,36	0,33	0,33	1,7	1,2	1,2	1,0	0,9
08199	Preparations of a kind used for animal food, n.e.s.	4459	5453	6872	4465	4322	0,41	0,48	0,59	0,37	0,32	1,2	1,4	1,9	1,1	0,9
33419	Other light petroleum oils and light oils obtained from bituminous n	8	21870	0	0	0	0	1,91	0	0	0	0,0	5,7	0,0	0,0	0,0
33541	Petroleum bitumen and other residues of petroleum oils or of oils d	242	2524	4260	8428	7384	0,02	0,22	0,37	0,7	0,54	0,1	0,7	1,2	2,1	1,5
41132	Fats of bovine animals, sheep or goats, raw or rendered, whether	4079	4883	4586	6998	8599	0,37	0,43	0,4	0,58	0,63	1,1	1,3	1,3	1,7	1,7
42111	Crude oil, whether or not degummed	1339	746	7244	12130	12079	0,12	0,07	0,62	1,01	0,88	0,4	0,2	2,0	3,0	2,4
42229	Refined oil and its fractions	9828	9457	12070	18871	22489	0,9	0,83	1,04	1,57	1,65	2,7	2,5	3,4	4,6	4,5
53342	Paints and varnishes (including enamels and lacquers) based on s	2991	3288	3406	7115	7360	0,27	0,29	0,29	0,59	0,54	0,8	0,9	0,9	1,7	1,5
54163	Antisera and other blood fractions; vaccines	7109	5073	3498	7246	9154	0,65	0,44	0,3	0,6	0,67	1,9	1,3	1,0	1,8	1,9
54191	Wadding, gauze, bandages and similar articles (e.g., dressings, ad	3084	2203	2221	14362	19927	0,28	0,19	0,19	1,2	1,46	0,8	0,6	0,6	3,5	4,0
56216	Urea, whether or not in aqueous solution	4382	8903	7582	10788	13601	0,4	0,78	0,65	0,9	1	1,2	2,3	2,1	2,6	2,8
57111	Polyethylene...having a specific gravity of less than 0.94	5330	5277	5134	5902	8243	0,49	0,46	0,44	0,49	0,6	1,4	1,4	1,4	1,4	1,7
64126	Other paper and paperboard, weighing 40 g/m2 or more but not m	3962	3642	3918	6175	8110	0,36	0,32	0,34	0,51	0,59	1,1	1,0	1,1	1,5	1,6
66121	Cement clinkers	6815	5883	2354	4240	11143	0,63	0,51	0,2	0,35	0,82	1,8	1,5	0,7	1,0	2,3
66245	Glazed ceramic flags and paving, hearth or wall tiles; glazed ceram	5693	6121	6244	7663	10994	0,52	0,54	0,54	0,64	0,8	1,5	1,6	1,7	1,9	2,2
66511	Carboys, bottles, flasks, jars, pots, phials and other containers, of	8639	8491	7353	8169	8298	0,79	0,74	0,63	0,68	0,61	2,3	2,2	2,0	2,0	1,7
67413	Flat-rolled products...otherwise plated or coated, of a width of 600 m	19811	17802	13895	14061	21014	1,82	1,56	1,2	1,17	1,54	5,4	4,7	3,9	3,4	4,2
69119	Other	6311	3247	6149	2899	7592	0,58	0,28	0,53	0,24	0,56	1,7	0,9	1,7	0,7	1,5
77315	Other electric conductors, for a voltage exceeding 80 V but not exc	5956	7123	6734	9397	10394	0,55	0,62	0,58	0,78	0,76	1,6	1,9	1,9	2,3	2,1
89319	Articles for the conveyance or packing of goods, n.e.s.; stoppers, l	11399	13584	14377	16149	17334	1,05	1,19	1,24	1,35	1,27	3,1	3,6	4,0	4,0	3,5
All above items							10,8	12,3	10,5	14,1	15,6	31,9	36,7	34,0	41,4	43,0

Source : COMTRADE Statistics

Elab : Authors

Table 23: Nicaragua: Relative importance of selected imports in parts and components.

SITC	Item description	Imports (Value in thousands \$)					Shares (%)					Imports in P&C				
							Total imports									
		2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
78439	Other parts and accessories...of the motor vehicles of groups 722	7023	6318	7395	7506	8815	0,65	0,55	0,64	0,63	0,65	8,9	6,8	8,8	8,7	9,3
71392	Parts, n.e.s, for the internal combustion piston engines of subgrou	4454	5446	6257	4731	6774	0,41	0,48	0,54	0,39	0,5	5,6	5,9	7,5	5,5	7,2
77812	Electric accumulators (storage batteries)	4165	4518	6190	5542	5973	0,38	0,4	0,53	0,46	0,44	5,3	4,9	7,4	6,4	6,3
75997	Parts and accessories (other than covers, carrying cases and the	3773	5549	5167	4576	5095	0,35	0,49	0,45	0,38	0,37	4,8	6,0	6,2	5,3	5,4
78537	Parts and accessories of other vehicles of group 785	2535	2185	2371	3121	3322	0,23	0,19	0,2	0,26	0,24	3,2	2,3	2,8	3,6	3,5
76493	Parts and accessories suitable....with the apparatus and equipmer	1829	1636	3470	2291	3955	0,17	0,14	0,3	0,19	0,29	2,3	1,8	4,1	2,7	4,2
77641	Digital monolithic integrated units	992	1117	2584	2594	3204	0,09	0,1	0,22	0,22	0,23	1,3	1,2	3,1	3,0	3,4
76491	Parts and accessories suitable....with the apparatus of subgroup 7	1456	1313	2338	3831	1273	0,13	0,11	0,2	0,32	0,09	1,8	1,4	2,8	4,5	1,4
77255	Other switches	3242	2519	1506	1402	1282	0,3	0,22	0,13	0,12	0,09	4,1	2,7	1,8	1,6	1,4
77822	Discharge lamps (other than ultraviolet lamps)	3041	1776	1380	1483	1729	0,28	0,16	0,12	0,12	0,13	3,9	1,9	1,6	1,7	1,8
62593	Used pneumatic tyre	2027	2150	2052	1197	1234	0,19	0,19	0,18	0,1	0,09	2,6	2,3	2,4	1,4	1,3
77282	Other parts	614	5879	566	577	723	0,06	0,51	0,05	0,05	0,05	0,8	6,3	0,7	0,7	0,8
77261	Boards, panels (including numerical control panels)....for a voltage	1468	1600	1183	2651	1312	0,13	0,14	0,1	0,22	0,1	1,9	1,7	1,4	3,1	1,4
71391	Parts, n.e.s, for the internal combustion piston engines of subgrou	2304	1264	1088	1417	1764	0,21	0,11	0,09	0,12	0,13	2,9	1,4	1,3	1,6	1,9
77281	Boards, panels, consoles, desks, cabinets and other bases for the	715	4661	958	621	534	0,07	0,41	0,08	0,05	0,04	0,9	5,0	1,1	0,7	0,6
77244	Isolating switches and make-and-break switches	1006	3915	187	340	942	0,09	0,34	0,02	0,03	0,07	1,3	4,2	0,2	0,4	1,0
72399	Other parts for the machinery of group 723 (excluding heading 723	1728	1182	1064	1482	743	0,16	0,1	0,09	0,12	0,05	2,2	1,3	1,3	1,7	0,8
74529	Parts of the machinery of subgroup 745.2 and heading 775.3	567	573	915	2636	1265	0,05	0,05	0,08	0,22	0,09	0,7	0,6	1,1	3,1	1,3
78433	Brakes and servo-brakes and parts thereof	1050	1013	1125	1189	1474	0,1	0,09	0,1	0,1	0,11	1,3	1,1	1,3	1,4	1,6
62929other form of Conveyor or transmission belts or belting,	1107	999	1178	1196	1288	0,1	0,09	0,1	0,1	0,09	1,4	1,1	1,4	1,4	1,4
All above items							4,2	4,9	4,2	4,2	3,9	57,2	59,8	58,3	58,5	55,9

Source : COMTRADE Statistics

Elab : Authors

Table 24: The two South American economies: Exports in parts and components by broad subgroups.

SITC	Item description	Argentina					Compound growth rate	Brazil					Compound growth rate
		Imports (Value in thousand dollars)						Imports (Value in thousand dollars)					
		2000	2001	2002	2003	2004		2000	2001	2002	2003	2004	
62	Rubber manufactures, n.e.s.	15952	11134	10059	9587	15591	-0.6	117030	109241	107117	107751	178093	11.1
65	Textile yarn, fabrics, made-up articles, n.e.s., and related products	4907	3698	2916	3659	5565	3.2	11829	11886	10716	6610	20578	14.8
69	Manufactures of metals, n.e.s.	18528	30353	29969	12517	25468	8.3	74139	82066	74214	78496	125972	14.2
71	Power-generating machinery and equipment	236227	171467	159018	157719	215761	-2.2	1213379	1314629	1414116	1716328	2113939	14.9
72	Machinery specialized for particular industries	30165	26095	14186	18584	25272	-4.3	178359	141375	155858	133248	327732	16.4
73	Metalworking machinery	10678	10342	10976	12725	13964	6.9	50263	39077	40935	43580	75463	10.7
74	General industrial machinery and equipment, n.e.s., and machine parts, n.e.	48946	55560	53848	62843	78912	12.7	191479	185344	181642	165252	305667	12.4
75	Office machines and automatic data-processing machines	13466	12544	11783	7068	6316	-17.2	40928	49673	48115	36423	51781	6.1
76	Telecommunications and sound-recording and reproducing apparatus and equipm	25743	26000	22258	29397	36148	8.9	435890	405388	326108	273364	326241	-7.0
77	Electrical machinery, apparatus and appliances, n.e.s., and electrical part	98430	111306	95172	78531	98235	0.0	656716	607485	648215	527342	824613	5.9
78	Road vehicles (including air-cushion vehicles)	518167	428896	434285	497775	668890	6.6	1399453	1371911	1334110	1633104	2220085	12.2
79	Other transport equipment	5848	4465	3851	4239	5829	-0.1	149008	205279	124269	95668	125787	-4.1
81	Prefabricated buildings; sanitary, plumbing, heating and lighting fixtures	4	32	91	37	22	52.9	1	2	3	0	16	89.9
82	Furniture, and parts thereof; bedding, mattresses, mattress supports, cushi	255	444	373	256	863	35.6	3654	5193	3619	3127	5400	10.3
87	Professional, scientific and controlling instruments and apparatus, n.e.s.	10519	10465	8569	7282	7005	-9.7	20854	20171	33480	13111	26362	6.0
88	Photographic apparatus, equipment and supplies and optical goods, n.e.s.; w	67	42	66	55	53	-5.7	1114	712	291	4	367	-24.2
89	Miscellaneous manufactured articles, n.e.s.			1	20	0		65	56	2	0	13	
62	Rubber manufactures, n.e.s.	1.5	1.2	1.2	1.1	1.3		2.6	2.4	2.4	2.2	2.6	
65	Textile yarn, fabrics, made-up articles, n.e.s., and related products	0.5	0.4	0.3	0.4	0.5		0.3	0.3	0.2	0.1	0.3	
69	Manufactures of metals, n.e.s.	1.8	3.4	3.5	1.4	2.1		1.6	1.8	1.6	1.6	1.9	
71	Power-generating machinery and equipment	22.8	19.0	18.5	17.5	17.9		26.7	28.9	31.4	35.5	31.4	
72	Machinery specialized for particular industries	2.9	2.9	1.7	2.1	2.1		3.9	3.1	3.5	2.8	4.9	
73	Metalworking machinery	1.0	1.1	1.3	1.4	1.2		1.1	0.9	0.9	0.9	1.1	
74	General industrial machinery and equipment, n.e.s., and machine parts, n.e.	4.7	6.2	6.3	7.0	6.6		4.2	4.1	4.0	3.4	4.5	
75	Office machines and automatic data-processing machines	1.3	1.4	1.4	0.8	0.5		0.9	1.1	1.1	0.8	0.8	
76	Telecommunications and sound-recording and reproducing apparatus and equipm	2.5	2.9	2.6	3.3	3.0		9.6	8.9	7.2	5.7	4.8	
77	Electrical machinery, apparatus and appliances, n.e.s., and electrical part	9.5	12.3	11.1	8.7	8.2		14.5	13.4	14.4	10.9	12.3	
78	Road vehicles (including air-cushion vehicles)	49.9	47.5	50.7	55.2	55.6		30.8	30.2	29.6	33.8	33.0	
79	Other transport equipment	0.6	0.5	0.4	0.5	0.5		3.3	4.5	2.8	2.0	1.9	
81	Prefabricated buildings; sanitary, plumbing, heating and lighting fixtures	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
82	Furniture, and parts thereof; bedding, mattresses, mattress supports, cushi	0.0	0.0	0.0	0.0	0.1		0.1	0.1	0.1	0.1	0.1	
87	Professional, scientific and controlling instruments and apparatus, n.e.s.	1.0	1.2	1.0	0.8	0.6		0.5	0.4	0.7	0.3	0.4	
88	Photographic apparatus, equipment and supplies and optical goods, n.e.s.; w	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
89	Miscellaneous manufactured articles, n.e.s.	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	

Data source: Author's calculations based on COMTRADE-statistics