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**Central American Economic Integration -
The Impact of a Customs Union with Guatemala on El
Salvador's Economy**

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Central American Economic Integration

The Impact of a Customs Union with Guatemala on El Salvador's Economy

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Abstract

This study analyzes the expected impact of the implementation of a Customs Union between Guatemala and El Salvador on the latter's economy. In order to do so, the main implications of moving from a Free Trade Area to a Customs Union are examined: CET establishment (with special attention paid to those sectors that would be negatively affected by a tariff reduction), RoO elimination and the abolition of customs controls. The analysis anticipates that efficiency gains from a number of factors (including reduction of goods' prices, RoO administrative and compliance expenses and custom-related transaction costs) surpass the negative impact on domestic producers that are affected by a tariff cutback.

KEY WORDS: Central American Economic Integration, Customs Union, Common External Tariff, Rules of Origin, Customs Controls, El Salvador, Guatemala.

JEL Classification: F15, F17, O24

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List of Abbreviations

ASETCA	Asociación Salvadoreña de Empresarios del Transporte de Carga Salvadoran Association of Cargo Transporters
CACM	Central American Common Market
CAFTA-DR	Dominican Republic - Central American Free Trade Agreement
CET	Common External Tariff
CGE	Computable General Equilibrium
COEXPORT	Corporación de Exportadores de El Salvador Salvadoran Exporters Corporation
COMRIEDRE	Consejo de Ministros Responsables de la Integración Económica y Desarrollo Nacional Economic Integration and Regional Development Ministers Council
CPCAGN	Convenio Permanente para la Comercialización de Arroz Granza Nacional Permanent Agreement of National Paddy Rice Trading
CRTCs	Customs-Related Transaction Costs
CTC	Change in Tariff Classification
CU	Customs Union
ESA-GUA	El Salvador - Guatemala
FTA	Free Trade Area
FTAs	Free Trade Agreements
MFN	Most-Favored Nation
NAFTA	North American Free Trade Agreement
RoO	Rules of Origin
TGIEC	Tratado General de Integración Económica Centroamericana Central American Economic Integration General Treaty

1. Introduction

Historically, regional integration has played a central role in El Salvador's economic policy. Apart from the social similarities and historical bonds that unify the nations in Central America, the country's own characteristics (including a small and densely populated territory, limited natural resources and undersized internal markets) have pushed it towards seeking regional strategies for development. The first economic integration plan took place in the 1960s, when a Central American Common Market was envisioned. However, the model collapsed in less than a decade, and it was followed by years of political instability and fiscal imbalances that virtually eliminated integration efforts from the regional agenda. Finally, the process was revived in the 1990s, with a new model based in a gradualist and voluntary approach.

In this environment, the countries have advanced in the integration process at different rates, based on their own development policies, their links with other countries and overall commitment to the project. In 2000, El Salvador and Guatemala took a leading role in this process with the subscription to an agreement that established the basis for the implementation of a Customs Union (CU) between their territories. After important progress was achieved in several areas, the nations subscribed to a protocol in 2009, in which the final issues of the process were defined.

The protocol was ratified in Guatemala a few months later. However, the Salvadoran Congress –under the influence of a group of national producers– failed to ratify the document, alleging that the policy's impact on the domestic economy was uncertain. This situation blocked the entire process and discussions among the allegedly affected sectors and political authorities over the potential consequences of the CU establishment were carried out. Nevertheless, to this date, there is no single study that estimates the effects of this measure on the Salvadoran economy –not even from the self-defined “vulnerable” sectors– which makes it challenging for policy makers to take informed and objective decisions.

This study intends to fill this gap by analyzing the potential impacts of the establishment of a ESA-GUA CU in the domestic economy (with special attention paid to the negatively affected sectors) in order to shed light to policy makers on this issue. To do so, the effects of the three main implications of moving from a Free Trade Area (FTA) to a CU will be analyzed: The establishment of a Common External Tariff (CET), the elimination of Rules of Origin (RoO)

within bi-national transactions and the abolition of customs border controls. The latter is expected to reduce transactional costs significantly, which, according to El Salvador's government and private sector, is the main motivation to establish the bi-national CU.

The paper is structured as follows: Chapter 2 addresses the historical context and current situation of the integration process between the two countries. Chapter 3 gives an overview of the theoretical definitions and implications of moving from an FTA to a CU. Chapter 4 analyzes the impact of the establishment of a CET, and the expected effects of tariff reduction in vulnerable sectors. Chapter 5 reviews the anticipated effects of the elimination of RoO. Chapter 6 addresses the expected reduction on custom-related transaction costs due to the abolition of customs controls. Finally, chapter 7 includes the conclusions and policy recommendations.

2. El Salvador and the Central American Economic Integration

2.1 Historical Background

The ESA-GUA Customs Union initiative must be acknowledged as a manifestation of a broader regional integration process, which has been an issue in Central America for almost 200 years. The five small countries (Guatemala, Honduras, El Salvador, Nicaragua and Costa Rica) constituted the Captaincy General of Guatemala within the Viceroyalty of New Spain during the Spanish colonial rule. In 1823, they emerged as an independent entity from Spain and Mexico with the proclamation of the “United Provinces of Central America”, which was transformed into the “Federal Republic of Central America” one year later.

The federation was plagued with economic and political problems from its beginnings. Throughout a period of only 15 years, the federal government went through an ongoing civil war between Conservative and Liberal forces, and it was heavily affected by poor communication systems within states, high regional unbalances of wealth and excessive debt (Pérez Brignoli, 1985). Nevertheless, at the base of all these problems was the lack of a regional economic plan that could articulate the interests of every country (Hernández, 1994). As a result, in 1838, the countries started to abandon the federation. El Salvador was the last nation to do so in 1841.

Since the federation’s collapse, many integration efforts within the region have been implemented. The most important attempt took place in the 1960s when the Central American Common Market (CACM) was envisioned. At the base of the strategy was the *Tratado General de Integración Económica Centroamericana* (TGIEC), signed in 1960, which established an aggressive plan to promote economic integration and industrialization in Central America based on an inward-looking approach. The agreement established an FTA in the region¹, and the nations committed to implementing the necessary policies to achieve a Customs Union and later a Common Market within a period of 5 years. This plan was complemented by a regionally-coordinated Import Substitution Industrialization (ISI) policy.

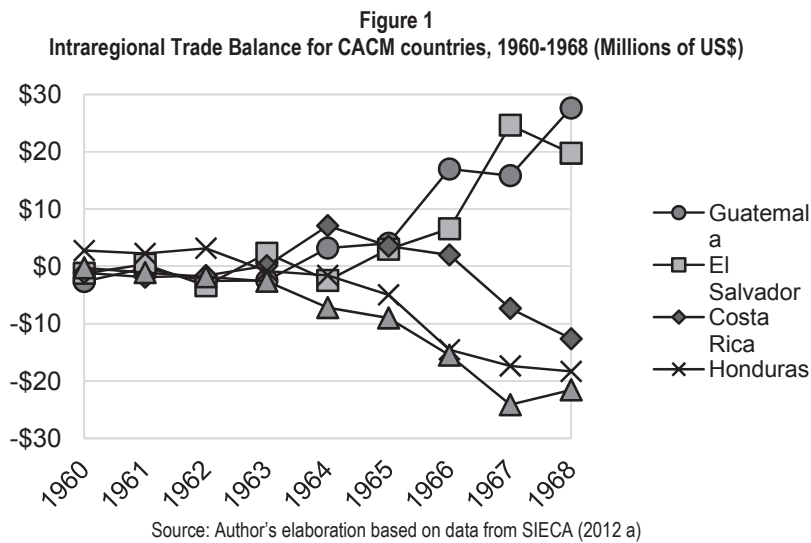
¹According to the “A” Annex of the TGIEC, the products excluded from free trade through the entire region are raw coffee and sugar. Roasted coffee, ethylic alcohol, petroleum derivatives and alcoholic beverages are restricted bilaterally by some countries.

Initial achievements were encouraging. In 1965, only 5 years after the implementation of the agreement, an almost perfect FTA had been established and most external tariffs were harmonized. The region experienced a great leap in industrial development, along with noticeable improvement in its transport, energy and communications infrastructure (Rodríguez Manzano, 2002). Furthermore, intraregional trade increased 7 times in only 8 years, going from \$63.0MM in 1960 to \$499.9MM in 1968².

However, during the second half of the 1960s, the model started to fall apart. Increased public investment, coupled with the reduction on the amount of income from tariffs and a decline on traditional export prices, led to fiscal problems in the countries. Additionally, the new industries' positive linkages to other sectors in the domestic economies were scarce. Consequently, although imports of final goods were effectively reduced, they were replaced by imports on the materials needed for their production and semi-final goods (Hernández, 1994). Nonetheless, the biggest problem of the model was the unequal distribution of benefits that it delivered among the countries. Most of the new industries were established in the relatively developed economies (Guatemala and El Salvador) which turned them into net regional exporters of manufactured goods and forced the rest (particularly Honduras and Nicaragua) to become net importers, widening the already noticeable economic gap between them (see Figure 1). The affected countries denounced this situation, but the group could not agree on an immediate solution. Meanwhile, fiscal pressures reached critical levels in some countries and their commitment to the project started to break up (Pérez Brignoli, 1985; Rodríguez Manzano, 2002).

Just when a structural change became critical to stop the model from its imminent collapse, a military conflict between El Salvador and Honduras in 1969 put a sudden halt to the region's integration process. As a result, Honduras left the CACM in 1971, and the rest of the countries implemented unilateral policies in order to counteract their fiscal imbalances and protect certain sectors from regional competition, stepping over the TGIEC agreement. During the next two decades, Central America was affected by political instability, armed conflicts and debt issues and the regional integration was virtually taken off the countries' agendas. The process was revived in the 1990s, when these issues had been overcome.

² Based on data from SIECA (2012 a).



2.2 Current Situation of the Regional Economic Integration Process

In 1991, a new project for regional integration, with the name of *Sistema de Integración Centroamericano* (SICA) was created. In contrast to previous integration attempts, the new system promotes a multidimensional scope, which includes not only economic but political, social, cultural and environmental aspects. Economic integration in the region was restored by the Protocol of Guatemala to the TGIEC, signed in 1993³. In this contract, the five countries pledged to establish an Economic Union in Central America, but were careful to define regional integration as a gradual and voluntary process that should be implemented only when it contributes to a country's economic progress. In contrast to the 1960s model, the new plan establishes an outward-looking growth approach; therefore, it does not include a regional industrial policy or any other coordinated development plan among the countries. Such policies, if implemented, are meant to be determined on a national scale.

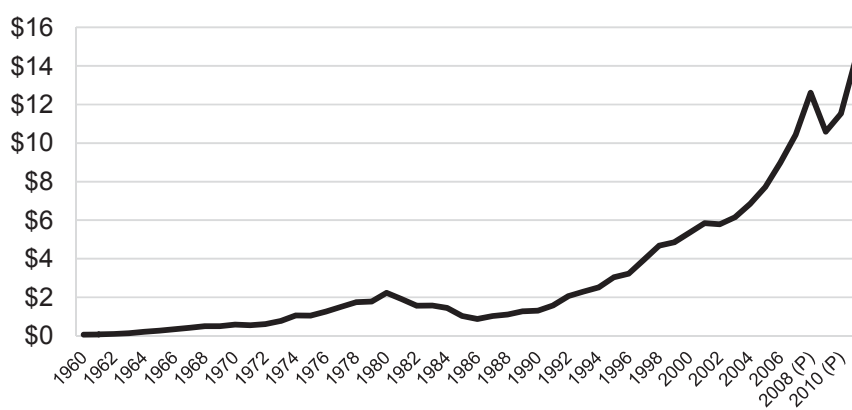
With the new economic integration scheme, the FTA within the region was restored, but retained the same exceptions specified on the "A" Annex of the TGIEC. Subsequently, the nations focused their efforts on the establishment of a regional CU. However, this process was hindered by the countries' own external policy agenda, which usually prioritized bilateral preferential trade agreements over regional integration (ECLAC, 2011). And so, although a high percentage of product's tariffs are harmonized and important progress has been achieved in

³ The scope of this agreement was originally limited to the 5 countries signatories of TGIEC in 1960; however, negotiations to incorporate Panama in the economic integration process started in August 2011 and concluded with its full inclusion in June 2012.

coordinating a wide array of regulation concerning trade⁴, the CACM is still considered to be a hybrid between “an almost perfect free trade area and an imperfect customs union” (SICE, 2012).

Intraregional trade has grown exponentially since the reestablishment of the integration process, going from \$2.3bn in 1993 to \$14.4bn in 2011 (see Figure 2).

Figure 2
Intraregional Trade in CACM, 1960-2011 (Billions of US\$)



Source: Author's elaboration based on data from SIECA (2012 a). (P)= Projected Value

Intraregional trade imbalances persist, both in terms of *value* and *type* of goods traded by the countries. With regard to the first, trade imbalances resemble the pattern portrayed 50 years ago during the first years of the CACM, with the exception that El Salvador has become a net importer –a situation prevailing since the 1980s- and Costa Rica is now a well-established net exporter in the region. Disparities are also noticeable when considering the contribution of each country to regional trade: Guatemala and El Salvador, the most important players, accounted for more than 50% of the intraregional trade and almost 60% of its exports in 2011; their mutual trade alone represents 25% of the total⁵.

In terms of the type of goods traded, there is a clear difference between the regional exports of Costa Rica, El Salvador and Guatemala and those coming from Honduras and Nicaragua. The

⁴ These include legislation on rules of origin, safeguards, unfair trade, sanitary and phytosanitary procedures, transport and customs manuals (SIECA 2012 b).

⁵ Calculation bases on SIECA (2012 a)

first ones are much more diversified and include an important percentage of manufactured and higher value-added products (Rueda Junquera, 2006)⁶.

The gradualism and voluntariness enforced by the new framework resulted in an integration process that has frequently evolved bilaterally or multilaterally, and only seldom on a truly regional scale. In this way, integration has advanced further among those countries with already important trade links, shared economic interests, similar external policies and strong commitment to regionalization. This has led to the emergence of different economic blocks within Central America; for example, the “Northern Triangle” (constituted by Guatemala, Honduras and El Salvador) and Guatemala-El Salvador⁷. These two countries took the lead on the regional economic integration process by signing an agreement to establish a CU that aims to eliminate all custom controls between the two countries (MINEC, 2012).

The initiative started in 1996 when the Economic Integration and Regional Development Ministers Council (COMRIEDRE) approved the countries’ desire to advance at a faster speed in the establishment of a CU within their territories⁸. In 2000, both nations subscribed the *Convenio Marco para el Establecimiento de una Unión Aduanera* (which was ratified and became binding in 2002). This document defined the general guidelines to reach the CU. Having achieved important advances in the areas of trade, customs coordination and regulations, a Protocol to this agreement was subscribed in 2009, in order to establish the institutional framework that would be responsible for the implementation process and normal functioning of the CU. El Salvador’s Congress then stopped the process when it failed to ratify the Protocol.

2.3 El Salvador towards a Customs Union with Guatemala

El Salvador and Guatemala’s shared interest towards regional integration is grounded in a number of reasons. These include similar levels of economic development, productive structure and macroeconomic policies, as well as the constant search for market expansion, and of course, geographical proximity. These factors have led to historically close economic relations. Figure 3 shows the main economic indicators for both countries in 2011.

⁶ It should be noticed, however, that due to the voluntary nature of the nations’ involvement in the process, as well as the absence of a current regional industrial policy to blame for inequality issues, these imbalances are not an argument for dispute nowadays.

⁷ Another example of fragmentation within the region is the “CA-4” (constituted by Guatemala, Honduras, El Salvador and Nicaragua), a political block that implemented a harmonized visa regime and free movement of people within its territory.

⁸ Resolution No. 27-96 (COMRIEDRE-IV)

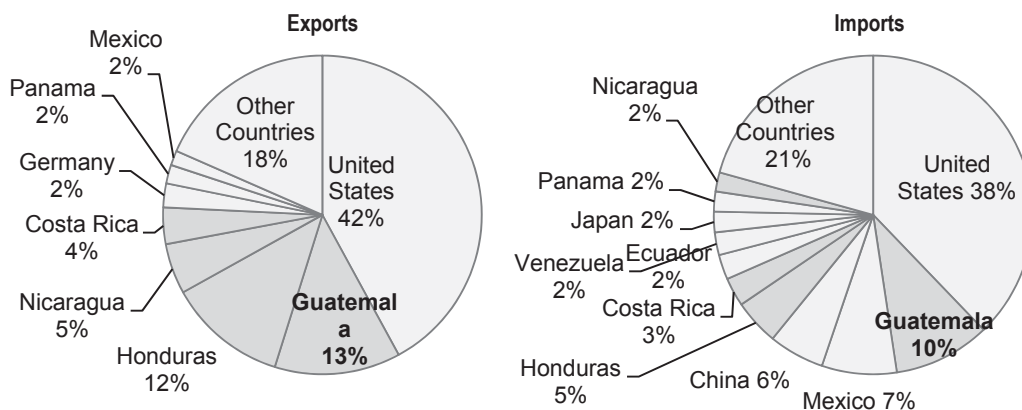
Figure 3
El Salvador and Guatemala's Main Economic Indicators (2011)

Indicator	El Salvador	Guatemala
Population (millions)	6.1	14.1
GDP (billions of US\$)	23.1	46.9
GDP per capita (PPP US\$)	7,600	5,000
Inflation (%)	5.1	4.1
Govt. Debt (% GDP)	57.1	24.5
Sectors		
<i>Agriculture</i>	11	13
Contribution to GDP (%)		
<i>Industry</i>	30	24
<i>Services</i>	58.7	62.7

Source: Author's elaboration based on data from BCR (2012 a), BANGUAT (2012) and CIA (2012)

From the Salvadoran standpoint, the implementation of a Customs Union with Guatemala offers important benefits. The main one is the facilitation and strengthening of trade relations with the country's most important partner in the CACM (MINEC, 2012). In fact, Guatemala is El Salvador's most important trading partner after the US (Figure 4).

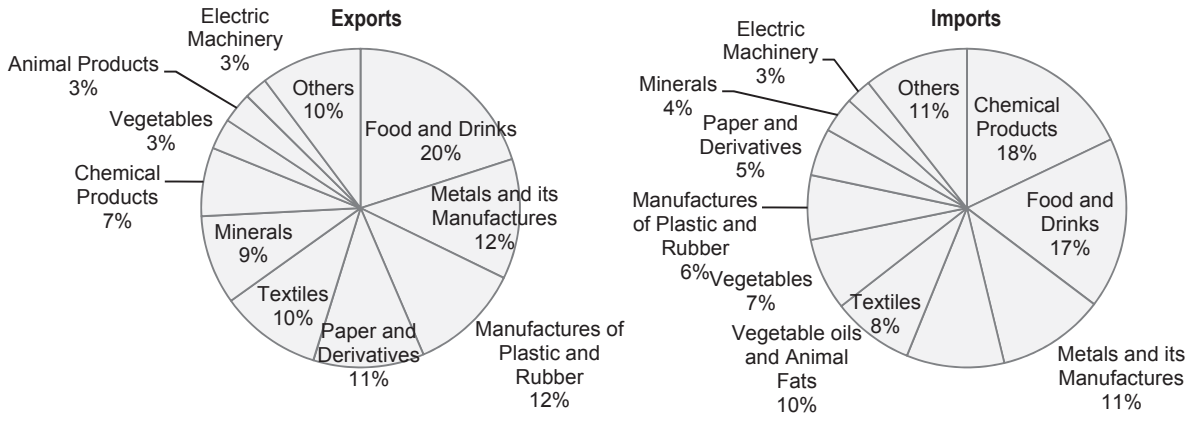
Figure 4
El Salvador's Main Trade Partners (2011)



Source: Author's elaboration based on data from BCR (2012 a). Highlighted: CACM

The composition of these trade flows is shown in Figure 5. Intra-industry trade represents an important part of total trade with Guatemala and takes place mostly on chemical products and medicines, food and drinks, metal manufactures, plastic and rubber manufactures and textiles.

Figure 5
El Salvador's Bilateral Trade with Guatemala by Sectors (2011)



Source: Author's elaboration based on data from BCR (2012 a)

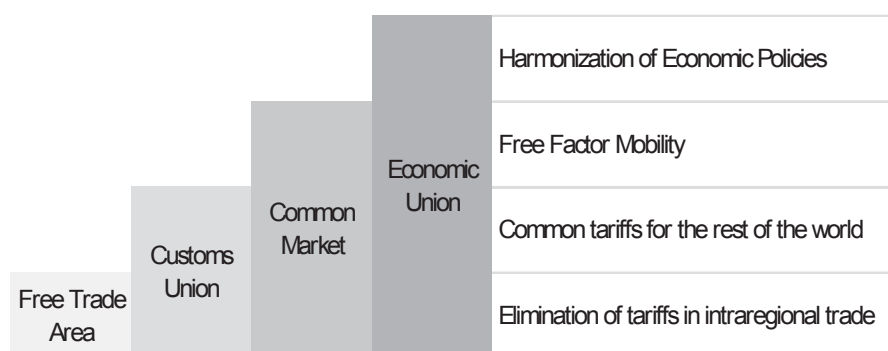
According to the Ministry of Economy of El Salvador, besides the promotion of bilateral trade, the CU will give the country's firms –particularly small and medium enterprises- easier access to a bigger market, in which Salvadoran products would become more competitive by the reduction of transportation costs, transaction times and commercial intermediation. The expanded market would also increase in overall efficiency by taking advantages of economies of scale. These benefits would then push for an increase in bilateral investment and FDI flows to the Union. Finally, this policy will promote the establishment of a modern and more efficient customs system (MINEC, 2012).

3. Theoretical Background

3.1. Differences between an FTA and a CU

Free Trade Areas and Customs Unions represent the first two stages within the general process of economic integration. Figure 6 compares the main characteristics of the different integration levels.

Figure 6
Comparison of Different Economic Integration Levels



Source: Author's elaboration based on UNCTAD (2007)

The establishment of an FTA implies the eventual elimination of tariffs in order to promote free trade of goods among its members. However, each nation retains the authority to define tariff rates against non-participating countries and blocks, which opens the door for trade deflection to take place. This happens when certain goods enter the free trade area through the nation with lower tariffs, just to be transshipped to other countries using the preferential treatment. Due to this problem, FTAs rely on a number of requirements to determine which goods have “origin” in the partner country and are entitled to duty-free trading, which are known as Rules of Origin. These requirements usually intend to measure how much a product has been transformed in the partner country, and it is usually proxied with changes in tariff classifications (CTC), regional value content, specified process, technological requirements and other variables.

The establishment of a CU requires the implementation of a Common External Tariff (CET) with respect to non-members, which eliminates the problem of trade deflection and,

consequently, makes RoO irrelevant. This means that, in principle, all goods and services can move freely within the CU, which implies no need for customs control⁹.

3.2. Advantages and Disadvantages of a CU versus an FTA

Literature comparing the welfare effects of different economic integration levels, particularly regarding the move from an FTA to a CU, is scarce. Krueger (1995) pioneered in this field, contrasting the welfare potential of both integration stages from a theoretical approach. In her study, she concludes that CU contracts are “strictly Pareto superior to free trade agreements” (Krueger, 1995, p. 4). Other studies followed Krueger’s initiative, including Panagariya and Findlay (1996), Mirus and Rylska (2001) and Park and Park (2008); however, there is still no empirical study that estimates the overall welfare impact of moving from an FTA to a CU. This section reviews the most important advantages and disadvantages of this transition according to the literature.

One of the most emphasized aspects of moving to a CU is the elimination of RoO requirements, which can have important distorting effects (Krueger, 1995). In the first place, RoO can be used as tools to protect economic sectors with lobbying power, neutralizing the gains from duty-free trade within an FTA (Estevadeordal, Harris and Suominen, 2009). Secondly, in order to verify RoO attainment, governments incur administrative costs, while importers and exporters assume compliance costs (paperwork) to prove the origin of the products (Georges, 2007). The latter can become so burdensome, that an exporter may even prefer to pay the tariff instead of bothering with the documentation needed to prove the origin of the products (Krishna, 2004). The third –and probably the hardest to quantify– is the distortionary effect it can have on production decisions at firm level. This happens because RoO act as an implicit subsidy for the factors of production and intermediate goods generated by the members of the FTA (Krishna and Krueger, 1995). In this way, local producers have the incentive to make use of regional capital, labor and other inputs in order to comply with the RoO parameters and qualify for free trade within the FTA boundaries. If the FTA market is attractive enough, it may also attract investment inflows into a member country to produce with local inputs in order to obtain preferential treatment, even if the price of these inputs is higher. Consequently, RoO have the

⁹ These definitions are not always fully complied by integration agreements. However, the governments of El Salvador and Guatemala have made explicit their desire to constitute a “complete CU”, in which the establishment of CET and the elimination of customs border controls result in unrestricted movement of goods and services within their territories (MINEC, 2012).

potential to create a distortionary effect both in trade patterns and investment flows in the region (Krishna, 2004).

Krueger (1995) highlights the fact that a larger customs territory would result in efficiency gains due to economic of scale for private firms in the region, as well as increased negotiation power of the customs union towards other countries or economic blocks. The negative consequences of the proliferation of Free Trade Agreements (FTAs) are also emphasized. The intricate and often overlapping conditions of a large number of agreements may create a confusing trade framework for companies and public institutions. This issue was later regarded as the “Spaghetti Bowl Effect”, a term first used by Bhagwati (1995). Finally, the cutback on custom-related costs because of elimination (or reduction) of border controls is only mentioned in some studies (including Mirus and Rylska, 2001); however, both theoretical and empirical studies on the subject have failed to recognize the relative significance of this factor.

In terms of the costs of implementing a CU, the literature points out the need to coordinate current and future external trade policy as a block; a sacrifice that is seen by some as a loss of sovereignty of individual states. Also, the implementation of a CET may involve opposition from lobbyists of negatively affected sectors because of tariff reductions. According to Mirus and Rylska, these factors alone explain why it is “politically easier to arrive at an FTA than a CU” (2001, p. 8).

4. The Impact of the Establishment of a Common External Tariff

4.1 Literature and Previous Studies

The welfare and output effects of the adoption of a CET when moving from an FTA to a CU are usually measured using Computable General Equilibrium (CGE) models. For instance, Brown, Deardorff and Stern (2001) use this method when trying to quantify the effects of the establishment of a CET in North America when considering a move from NAFTA to a North American CU. Park and Park (2008) propose a number of CET scenarios in order to estimate the welfare impact of the implementation of a CU between ASEAN+3 and China, Japan and Korea using the GTAP (Global Trade Analysis Project) model. There are, however, a number of studies that use partial equilibrium estimations, such as Khorana, Kimbugwe and Perdakis (2007) when trying to determine the impact of tariff reductions under the East African Community framework for Uganda.

Although widely used, CGE models face a large array of critics and many economists question the reliability and overall usefulness of their results. This is mainly due to the frequent use of “questionable” assumptions made when calibrating them, which are hard to detect behind the large number of variables and complex structures. As a result, CGE models have been referred as “black boxes”, which may deliver suspicious and self-driven outcomes (Panagariya and Duttagupta, 2001; Wing, 2003). Partial equilibrium analyses deliberately leave out important variables and are much less ambitious in the array of information they deliver; however, the steps and assumptions made within the methodology are more easily traceable and open to inspection and may be better suited for the analysis of changes in specific sectors or products. Furthermore, when the impact of changes in tariffs is evaluated, many of the variables that are assumed constant—such as international prices— do remain so if we consider the case of small countries that have no relevance in world markets.

Until now, there is no study that addresses the possible effects of tariff changes in the Salvadoran economy in order to harmonize them with Guatemala¹⁰.

¹⁰ However, in the case of Guatemala, there is a study from Moran and Serra (1993) that uses a CGE model to analyze the impact of different scenarios of tariff changes in order to reach a CET within the CACM. They conclude that such tariff reforms would produce modest but positive results, although they also admit their simulation may underestimate the total effect of such policy.

4.2. Overview of the Situation

Most of the product tariffs among El Salvador and Guatemala have already been coordinated, with the exception of 341 products, which represent 4.9% of the universe of goods and 7.8% of the value of all Salvadoran imports in 2011¹¹. Figure 7 shows the average tariff differences, imports and tax revenues in El Salvador for these products, classified by economic area in 2011¹².

Figure 7- Detail of Non-Harmonized Tariff Products between El Salvador and Guatemala (2011)

Economic Area	Number of products with non-harmonized tariffs	El Salvador's Current Average Tariff	Guatemala's Current Average Tariff	El Salvador's Imports in 2011 (FOB)	El Salvador's Tariff Revenues in 2011
Transport and Communications	69	3.5%	10.1%	\$ 161,027,210	\$ 6,093,388.26
Meats	58	50.1%	14.7%	\$ 118,431,572	\$ 54,270,284.32
Dairy Products	18	32.2%	15.0%	\$ 93,751,298	\$ 36,083,577.34
Vehides	41	16.7%	15.1%	\$ 80,843,459	\$ 20,635,401.12
Construction Materials	27	6.5%	2.8%	\$ 74,099,014	\$ 1,206,479.77
Petroleum Products	3	3.7%	6.7%	\$ 71,944,932	\$ 723,922.38
Food Processing Products	8	13.1%	6.9%	\$ 70,864,796	\$ 227,325.50
Cereals	8	34.4%	21.8%	\$ 38,486,059	\$ 14,875,406.98
Motocycles	6	5.0%	10.0%	\$ 14,998,978	\$ 749,948.91
Cigarettes	1	30.0%	20.0%	\$ 14,683,133	\$ 4,404,939.89
Alcoholic Beverages	3	26.7%	23.3%	\$ 14,142,216	\$ 3,552,790.06
Electric Appliances	17	4.4%	10.3%	\$ 12,697,500	\$ 3,096.40
Fertilizers	4	5.0%	0.0%	\$ 5,144,844	\$ 257,242.22
Building Appliances	1	15.0%	10.0%	\$ 4,515,572	\$ 677,335.74
Timber Industry	16	5.0%	10.0%	\$ 3,870,670	\$ 193,533.48
Firearms	18	28.6%	15.8%	\$ 3,867,383	\$ 1,160,214.81
Wooden Tools	1	0.0%	10.0%	\$ 2,541,551	\$ -
Chemical Products	5	33.0%	4.0%	\$ 2,453,188	\$ 197,419.12
Shoes and Clothes Materials	5	11.0%	10.0%	\$ 2,429,312	\$ 268,446.24
Industrial Goods	2	7.5%	5.0%	\$ 1,193,230	\$ 66,614.07
Sugar Beet and others	2	0.0%	10.0%	\$ 303,154	\$ -
Recording Devices	7	0.0%	11.4%	\$ 281,431	\$ -
Veterinary Medicines	7	0.0%	5.0%	\$ 114,251	\$ -
Sugar, Jelly and Sweets	4	40.0%	17.5%	\$ 49,168	\$ 19,667.22
Transportation Vehides for Construction	2	1.0%	0.0%	\$ 28,497	\$ 284.97
Textiles	4	3.8%	10.0%	\$ 28,028	\$ 1,401.41
Shoe Covers	1	20.0%	15.0%	\$ 2,002	\$ 400.31
Paper and Paper products	2	10.0%	0.0%	\$ 960	\$ 96.00
Agricultural Goods	1	0.0%	23.7%	\$ 241	\$ -
Grand Total	341	18.4%	11.5%	\$ 792,793,647	\$ 145,669,216.52

Source: Author's calculations using data from MINEC (2011) and BCR (2012 a)

¹¹ This analysis does not consider the products excluded from free trade by the "A" Annex of the TGIEC. These goods have been historically protected and its liberalization would require a more in-depth analysis. The pressure to keep the current protection is so high, that some promote to treat them as "exceptions" within the CU project (Flores and Guth, 2012).

¹² 19 products in this group have a tariff-free quota established; however, these amounts are usually negligible (Flores and Guth, 2012). In these cases, the tariff applied to the products outside the quota was used.

As shown in Figure 7, the products with dissimilar tariffs derive from a wide array of economic areas. However, in some cases the entire sector exhibits conflicting tariffs (for instance, in Meats and Dairy Products), while in others, only specific products within sectors are involved (like in Textiles or Agricultural Goods).

4.3. Methodology and Results

A partial equilibrium analysis is used to evaluate the effects of the harmonization of tariffs for the identified products. First, a set of CET will be proposed based on the guidelines agreed by the countries in the CACM. Once there is an established tariff for each good, a change of imports prices can be calculated. Using these figures and the import-elasticity values for the products, the change in imports will be estimated, as well as the corresponding governmental tariff revenue.

Most studies, in the absence of parameters or clear guidelines for the establishment of common tariffs, propose different scenarios based on simple or weighted averages of the countries' rates. In this case, however, CACM nations have already agreed to follow certain guidelines for the harmonization of tariffs against third parties, which makes proposing rates less subjective and closer to reality¹³.

These guidelines were defined in 1996 by the Resolution #26-96 made by COMRIEDRE¹⁴. This Resolution defines a tariff structure for the region based on two criteria: the type of good concerned -using the Broad Economic Categories (BEC) classification- and whether the good is produced within the region or not, as shown in Figure 8. All countries in the region committed themselves to progressively modify their tariff structure based on this framework. Nevertheless, the agreement states there may be special cases in which different tariffs may be applied. These include fiscal reasons, commitments made to the WTO and exceptional situations with particular products (COMRIEDRE, 1996).

¹³ In fact, the most important tariff differences among the two countries come from the fact that El Salvador maintains tariffs above the agreed parameters, in contrast to Guatemala, which complies with them.

¹⁴ See also Res. #13-95 (COMRIEDRE II) and Res. #55-95 (CONSEJO XIII)

Figure 8
CACM's Current Guidelines for Tariff Establishment

Type of Good	Tariff
Raw Materials, Capital and Intermediate Goods not produced in the region	0%
Raw Materials produced in the region	5%
Capital and Intermediate Goods produced in the region	10%
Final Goods	15%

Source: COMRIEDRE (1996)

Based on these parameters, a CET for each product is proposed, which would illustrate an ideal harmonization scenario. The proposed criteria are shown in Figure 9.

Figure 9
Guidelines to Determine the Set of Proposed CETs

Type of Good	Production in the Region	Proposed CET
Raw Materials	Not produced	0%
	Produced	The highest tariff, up to 5%
Capital Goods and Intermediate Goods	Not produced	0%
	Produced	The highest tariff, up to 10%
Final Goods	Not produced	The average tariff, up to 15%
	Produced	The highest tariff, up to 15%

Source: Author's proposal based on CACM's current tariff guidelines

For those goods that are produced within the two countries (namely, at least by one of them), the proposed CET would be defined as the highest of both countries' tariff, but never above the maximum established in the agreement according to the BEC criteria (5%, 10% and 15% respectively). Subsequently, if a good is not produced in El Salvador and has no tariffs, but is produced in Guatemala and enjoys a tariff protection in that country, El Salvador should recognize that production is taking place "within the CU region" and match the tariff to that of Guatemala, as long as it does not exceed the maximum amount of protection previously approved¹⁵.

¹⁵ It should be noted, however, that there might be exceptions for this harmonization method. In cases where a country's protected industry is relatively small, or the other country's imports are considerable, harmonization will most likely be negotiated somewhere in between the two initial tariffs (Flores and Guth, 2012)

As explicitly agreed by the countries, the CET for raw materials, capital goods and intermediate goods that are not produced in the countries would be established at 0%. The regulation is not explicit about the treatment to final goods that are not produced in the region, and since there is no local industry to protect, such tariffs would be implemented only for fiscal reasons. Therefore, assuming both countries have equal negotiating power over this subject, the proposed CET will be established as the average of the two original tariffs with a ceiling of 15%¹⁶.

A change from the current tariff to the proposed CET would have an effect on the import price for each product. By using the El Salvador's import-elasticity values disaggregated by country and product, determined by Kee, Nicita, and Olarreaga (2008), an estimated change in imports for each good (taking 2011 as the base year) was calculated. In addition, the corresponding amount of tax revenue is calculated for each single good, based on the estimated amount of new imports and the new set of tariffs. Figure 10 shows the results of this exercise, grouping together goods by economic area and sorting them by the estimated change in imports.

According to these estimations, if the proposed set of CET was established, imports would increase in \$59.1MM, which would represent a raise of 0.6% in total Salvadoran imports. On the other hand, the \$59.8MM projected decrease in proceeds for the government would reduce the country's tariff revenue by 35.8% (from \$167.3MM to \$107.5MM); this translates to a change on the central government's total revenue of -1.8%¹⁷.

4.4. Analysis of Impact on Affected Sectors

The traditional approach to regional integration states that tariff reduction is beneficial for a country as it leads to overall welfare gains. Under its own set of assumptions, consumer gains based on goods' price reduction exceed the producer and governmental losses due to a decrease in production and tariff revenues (Matthews, 2003). However, the impact on affected local producers should be taken into account when considering the establishment of a policy that includes tariff cutbacks, especially if they constitute important sectors within the country's economic structure or its development strategy. In this study, the impact on the *domestic supply* of these sectors will be addressed comprehensively, given the fact that harmful (although non-estimated) economic consequences on domestic production is the main argument preventing the establishment of the CU between the two countries.

¹⁶ The maximum level does not apply to Cigarettes and Firearms, which are considered exceptional products.

¹⁷ Calculations based on data from BCR (2012 b)

Figure 10
Anticipated Impact of Proposed CETs Establishment by Economic Area

Economic Area	Current Weighted Average Tariff	Weighted Average CET	Imports in 2011 (FOB)	Estimated Change in Imports	% Change Imports	Estimated Change in Tariff Revenue
Meats	45.8%	15.0%	\$ 118,431,572	\$ 33,909,496	28.6%	\$ (31,419,124)
Dairy Products	38.5%	15.0%	\$ 93,751,298	\$ 15,637,937	16.7%	\$ (19,675,192)
Cereals	38.7%	11.5%	\$ 38,486,059	\$ 10,241,413	26.6%	\$ (9,220,604)
Vehides	25.5%	14.9%	\$ 80,843,459	\$ 8,375,069	10.4%	\$ (7,345,431)
Transport and Communications	3.8%	0.0%	\$ 161,027,210	\$ 5,666,827	3.5%	\$ (6,093,388)
Cigarettes	30.0%	25.0%	\$ 14,683,133	\$ 3,111,851	21.2%	\$ 43,806
Alcoholic Beverages	25.1%	15.0%	\$ 14,142,216	\$ 1,379,743	9.8%	\$ (1,224,496)
Building Appliances	15.0%	10.0%	\$ 4,515,572	\$ 348,858	7.7%	\$ (190,893)
Firearms	30.0%	23.3%	\$ 3,867,383	\$ 266,050	6.9%	\$ (195,973)
Shoes and Clothes Materials	11.1%	10.0%	\$ 2,429,312	\$ 182,264	7.5%	\$ (7,289)
Chemical Products	8.0%	5.4%	\$ 2,453,188	\$ 49,107	2.0%	\$ (59,169)
Sugar, Jelly and Sweets	40.0%	15.0%	\$ 49,168	\$ 16,397	33.3%	\$ (9,833)
Shoe Covers	20.0%	15.0%	\$ 2,002	\$ 88	4.4%	\$ (87)
Fertilizers	5.0%	5.0%	\$ 5,144,844	\$ -	0.0%	\$ -
Paper and Paper products	10.0%	10.0%	\$ 960	\$ -	0.0%	\$ -
Agricultural Goods	0.0%	10.0%	\$ 241	\$ (24)	-9.9%	\$ 22
Textiles	5.0%	10.0%	\$ 28,028	\$ (1,617)	-5.8%	\$ 1,240
Veterinary Medicines	0.0%	2.5%	\$ 114,251	\$ (3,532)	-3.1%	\$ 2,768
Recording Devices	0.0%	9.7%	\$ 281,431	\$ (31,440)	-11.2%	\$ 24,152
Sugar Beet and others	0.0%	10.0%	\$ 303,154	\$ (107,351)	-35.4%	\$ 19,580
Wooden Tools	0.0%	5.0%	\$ 2,541,551	\$ (125,764)	-4.9%	\$ 120,789
Timber Industry	5.0%	10.0%	\$ 3,870,670	\$ (301,017)	-7.8%	\$ 163,432
Motocycles	5.0%	7.5%	\$ 14,998,978	\$ (309,209)	-2.1%	\$ 351,784
Industrial Goods	5.6%	10.0%	\$ 1,193,230	\$ (316,606)	-26.5%	\$ 21,048
Electric Appliances	0.0%	5.0%	\$ 12,697,500	\$ (820,549)	-6.5%	\$ 592,483
Food Processing Products	0.3%	5.5%	\$ 70,864,796	\$ (3,652,909)	-5.2%	\$ 3,448,356
Petroleum Products	1.0%	10.0%	\$ 71,944,932	\$ (6,615,801)	-9.2%	\$ 5,805,613
Construction Materials	1.6%	9.4%	\$ 74,099,014	\$ (7,825,881)	-10.6%	\$ 5,022,863
Total	18.4%	9.7%	\$ 792,793,647	\$ 59,074,197	7.5%	\$ (59,823,826)

Source: Author's calculations using data from BCR (2012 a) and Kee et al. (2008)

Figure 11 shows the anticipated effects of the establishment of the proposed set of CETs on the three most affected economic areas, disaggregated by sectors. As the table highlights, poultry, cheese, beef and rice sectors are the economic segments that hold the biggest increase on imports -and represent the biggest reduction on tax revenues¹⁸-. An analysis of the effects of the proposed set of tariffs to domestic supply and demand for these sectors follows.

¹⁸ It should be noticed, however, that our partial equilibrium model cannot estimate the overall effect of this policy on governmental revenues. Reduction of prices on these products may result in an increase of other good's imports and local consumption, which could compensate (at least partially) the government's losses on the mentioned sectors.

Figure 11
Anticipated Impact of Proposed CETs Establishment on Meats, Dairy Products and Cereals Disaggregated by Sectors

Economic Area	Sector	ESA - Current Weighted Average Tariff	Weighted Average CET	Imports in 2011 (FOB)	Estimated Change in Imports	% Change Imports	Estimated Change in Tariff Revenue
Meats	Poultry	86.4%	15.0%	\$ 30,392,946	\$ 20,409,041	67.2%	\$ (18,629,694)
	Beef	30.3%	15.0%	\$ 73,275,931	\$ 8,711,359	11.9%	\$ (9,927,041)
	Pork	39.2%	15.0%	\$ 13,835,498	\$ 4,612,609	33.3%	\$ (2,657,063)
	Other Processed Meats	40.0%	15.0%	\$ 633,124	\$ 137,700	21.7%	\$ (137,626)
	Jams and others	40.0%	15.0%	\$ 290,898	\$ 38,491	13.2%	\$ (66,951)
	Non- Pork/Beef Derivatives	40.0%	15.0%	\$ 1,781	\$ 166	9.3%	\$ (420)
	Pork Derivatives	40.0%	15.0%	\$ 1,394	\$ 130	9.3%	\$ (329)
	Meats Total	45.8%	15.0%	\$ 118,431,572	\$ 33,909,496	28.6%	\$ (31,419,124)
Dairy Products	Cheese	40.0%	15.0%	\$ 78,800,218	\$ 13,889,478	17.6%	\$ (17,616,633)
	Milk and Cream	30.1%	15.0%	\$ 13,138,323	\$ 1,632,449	12.4%	\$ (1,745,194)
	Butter and Milk Fat	30.0%	15.0%	\$ 1,224,181	\$ 99,068	8.1%	\$ (168,762)
	Yogurt and other products	40.0%	15.0%	\$ 588,577	\$ 16,942	2.9%	\$ (144,603)
	Dairy Products Total	38.5%	15.0%	\$ 93,751,298	\$ 15,637,937	16.7%	\$ (19,675,192)
Cereals	Rice	40.0%	11.1%	\$ 34,930,275	\$ 9,988,703	28.6%	\$ (8,888,581)
	Black Beans	30.0%	15.0%	\$ 2,803,686	\$ 313,123	11.2%	\$ (373,584)
	Rice products	40.0%	15.0%	\$ 70,246	\$ 15,091	21.5%	\$ (15,298)
	Popcorn	5.0%	15.0%	\$ 681,852	\$ (75,505)	-11.1%	\$ 56,859
	Cereals Total	38.7%	11.5%	\$ 38,486,059	\$ 10,241,413	26.6%	\$ (9,220,604)

Source: Author's calculations using data from BCR (2012 a) and Kee et al. (2008)

4.5.1. Producers

4.5.1.1. Poultry Sector

Poultry production in El Salvador can be divided in two segments: commercial and traditional. Commercial poultry consists of producers that utilize specialized genetic lineages, advanced reproduction technologies and balanced feeding practices within their processes. This segment represents two thirds of the country's total production of poultry, and together with the egg industry, provides direct employment to 9,000 people and indirect employment to another 72,000. In contrast, traditional or "backyard" poultry lacks sophisticated breeding techniques and is aimed primarily at self-consumption; only household surpluses are sold in the market (Bidart, 2007).

According to a study made by *Superintendencia de Competencia* (El Salvador's national department for competition promotion), the commercial sector has had "a good performance both in terms of production and prices, (...) has been in line with the world markets and is one of the most dynamic economic sectors in the country" (Bidart 2007, pp. 26). Nevertheless, tariff protection for the industry is still high, particularly for the imports of poultry's "dark parts", which entails offal, thighs and legs. Remarkably high tariffs for these products were

established by all Central American countries in order to protect the local production from US exports within the CAFTA-DR framework. Since domestic consumption in the US is mostly limited to chicken breast, dark parts are practically discarded as waste and are sold in international markets at exceptionally low prices (Contreras, 2006). The difference in tariffs comes from the fact that Guatemala was the only country that fixed them at 15% from the start.

Not surprisingly, most of the increase in imports comes from poultry dark parts, where the reduction of tariffs is more dramatic (Figure 12). Increase in imports of these products together would reach \$14.6MM (123% growth). Among the rest of the products, the biggest effects take place for chicken sausages with an increase of 22% (\$2.2MM) and chicken wings and turkey, both with a growth of 44% (\$1.3MM and \$1.0MM respectively).

Figure 12
Anticipated Impact of Proposed CETs Establishment on Products within the Poultry Sector

Sector	Product	Current Weighted Average Tariff	Weighted Average CET	Imports in 2011 (FOB)	Estimated Change in Imports	% Change Imports	Estimated Change in Tariff Revenue
Poultry	Preparations w/ chicken parts or offal	164.0%	15.0%	\$ 8,249,800	\$ 8,731,545	106%	\$ (10,982,471)
	Chicken's thighs, legs and others	164.0%	15.0%	\$ 1,759,532	\$ 2,971,570	169%	\$ (2,175,967)
	Processed chicken products (sausages)	40.0%	15.0%	\$ 10,026,193	\$ 2,161,185	22%	\$ (2,182,370)
	Chicken's thighs, legs	164.0%	15.0%	\$ 1,036,854	\$ 1,751,082	169%	\$ (1,282,250)
	Chicken Wings	35.0%	15.0%	\$ 2,867,588	\$ 1,271,216	44%	\$ (382,835)
	Turkey	35.0%	15.0%	\$ 2,349,572	\$ 1,041,577	44%	\$ (313,678)
	Others	56.0%	15.0%	\$ 4,103,408	\$ 2,480,867	60%	\$ (1,310,122)
	Poultry Total	86.4%	15.0%	\$ 30,392,946	\$ 20,409,041	67%	\$ (18,629,694)

Source: Author's calculations using data from BCR (2012 a) and Kee et al. (2008)

The impact of decreasing tariffs on domestic production is hard to predict. The consequences in income for the traditional segment, although more vulnerable to adverse economic shocks, may be negligible as most of its production is not traded within the market but directly consumed. For the commercial sector, the anticipated outcomes are clearly more discouraging. Benavides and Herrera (2007) estimate that a tariff below 43% would make Salvadoran chicken thighs uncompetitive against foreign competition. Establishing a noticeably lower tariff will certainly have a harmful impact on the domestic production. Some even speculate that, given the considerable change in prices and the size of the local economy, if liberalization occurs, domestic demand could eventually become completely satisfied by imports (Bidart, 2007). Nevertheless, the current tariff structure is much more restrictive than needed and more emphasis should be placed in increase the sector's competitiveness, not only by reducing prices, but also increasing quality and reaching new markets.

4.5.1.2. Cheese Sector

Cheese production in El Salvador is generated by two different segments: industrial and artisanal. The artisanal level comprises more than 600 workshops led by small producers spread all across the country, while the industrial segment is formed by 8 large-sized production companies. In addition, there are at least 38 firms who started as artisanal workshops but have added some degree of technology in their processes (Superintendencia de Competencia, 2010). Domestic production focuses on local types of cheese, mainly “hard” varieties (such as *Duro and Morolique*) and *Quesillo*, a basic ingredient in many local dishes. Comparatively, the industrial segment also generates internationally produced types of cheese, including mozzarella and cheddar (Superintendencia de Competencia, 2010).

Although they mainly produce the same kind of products, industrial and artisanal cheese compete in very different markets and deal with highly dissimilar cost structures. Industrially-produced cheese is purchased by middle and upper-class consumers mainly through supermarkets and its price reflects the advanced technology used in the production process, sanitary regulation compliance, packing, refrigerated distribution and marketing costs. Artisanal cheese is bought by low-class consumers in popular markets, who are not overly concerned with food safety, but are very sensitive to price. Artisanal producers are able to achieve much lower costs by skipping sanitary measures, refrigerated distribution and marketing expenses (CAMAGRO, 2006; Superintendencia de Competencia, 2010). As a result, the two segments exhibit huge price differences on the same type of products. A recent study shows that industrially manufactured *Quesillo* was 63% more expensive than its traditional counterpart in 2009; the difference for fresh cheese was 115% during the same year (Superintendencia de Competencia, 2010).

Consequently, foreign competition is only relevant for the industrial segment, given that they share similar production processes and cost structures, which results in comparable products and prices. Even with the complete abolition of tariffs, traditional products would still be substantially cheaper than those imported – a crucial aspect for its consumer base. In addition, the type of products generated by this segment is very different from those produced outside the region. The real threat for the traditional segment is regional production of the same kind, especially that from Honduras and Nicaragua. Since these products do not comply with sanitary regulation, imports are restrained by non-tariff barriers, which results in high levels of smuggling (Ventura and Segovia, 2011).

Figure 13
Anticipated Impact of Proposed CETs Establishment on Products within the Cheese Sector

Sector	Product	Current Weighted Average Tariff	Weighted Average CET	Imports in 2011 (FOB)	Estimated Change in Imports	% Change Imports	Estimated Change in Tariff Revenue
Cheese	Processed and "Hard" Cheese	40.0%	15.0%	\$ 28,293,017	\$ 5,156,594	18%	\$ (6,299,765)
	Melted Cheese (includes "Quesillo")	40.0%	15.0%	\$ 30,776,696	\$ 5,147,047	17%	\$ (6,922,117)
	Mozzarella	40.0%	15.0%	\$ 16,661,698	\$ 3,036,707	18%	\$ (3,709,918)
	Cheddar	40.0%	15.0%	\$ 1,322,502	\$ 241,035	18%	\$ (294,470)
	Grated Cheese	40.0%	15.0%	\$ 1,129,055	\$ 202,341	18%	\$ (251,912)
	Fresh Cheese	40.0%	15.0%	\$ 7,323	\$ 908	12%	\$ (1,695)
	Total Cheese	40.0%	15.0%	\$ 78,800,218	\$ 13,889,478	18%	\$ (17,616,633)

Source: Author's calculations using data from BCR (2012 a) and Kee et al. (2008)

Figure 13 shows the effects of the proposed CETs by product. The biggest effect takes place in "Processed and hard cheese" (which includes both international and local products) and "Melted Cheese" (which includes *Quesillo*, one of the most demanded products in the market), with an increase in imports of \$5.2MM (18% growth) \$5.1MM (17%) respectively. The increase in imports of mozzarella would reach \$3.0MM (18% growth).

The industrial segment would compete directly against foreign produced mozzarella as well as internationally-produced types of cheese within the "Processed" and "Melted Cheese" categories, which include cheddar cheese, processed cheese slices and spread. Domestic industry would indeed lose market share on these product's local market. Regarding products such as *Quesillo* and local hard cheeses, which do not have direct substitutes by foreign competitors and represent a big share on the market, impact could be more limited. However, it would be hard to describe the overall sector's position as "vulnerable". According to Superintendencia de Competencia (2010), high concentration levels in the industry due to a limited number of competitors have enabled these companies to abuse their market power and establish high profit margins (Figure 14). In this case, continuing tariff protection for the industrial segment is counterproductive and reduction of tariffs would force the companies to reduce prices and margins, pushing competitiveness in the sector and benefiting a broad consumer base.

Figure 14
Average Profit Margins for Industrial Cheese Segment by Product, 2009

Costs and Revenues	Hard Cheese		Fresh Cheese		"Quesillo"		Processed Cheese		Cheddar Cheese	
Average Cost	\$	2.65	\$	1.57	\$	1.43	\$	1.72	\$	1.99
Average Price to Supermarkets	\$	3.24	\$	2.26	\$	2.07	\$	3.17	\$	3.79
Profit Margin		18.3%		30.4%		31.0%		45.8%		47.4%

Source: Superintendencia de Competencia (2010)

4.5.1.3. Beef Sector

Domestic production of beef predominantly comes from double-purpose cattle (consisting on breeds that are used for both meat and milk procurement) and, to a minimum extent, from discards of dairy cattle. Remarkably, there are no ranches exclusively dedicated to beef production in the country (Ángel, 2012). Double-purpose production is fragmented in small ranches through the country (most have less than 20 heads of livestock) and usually makes minor use of technology in their processes (Arévalo, 2003; Cordero Salas, 2005).

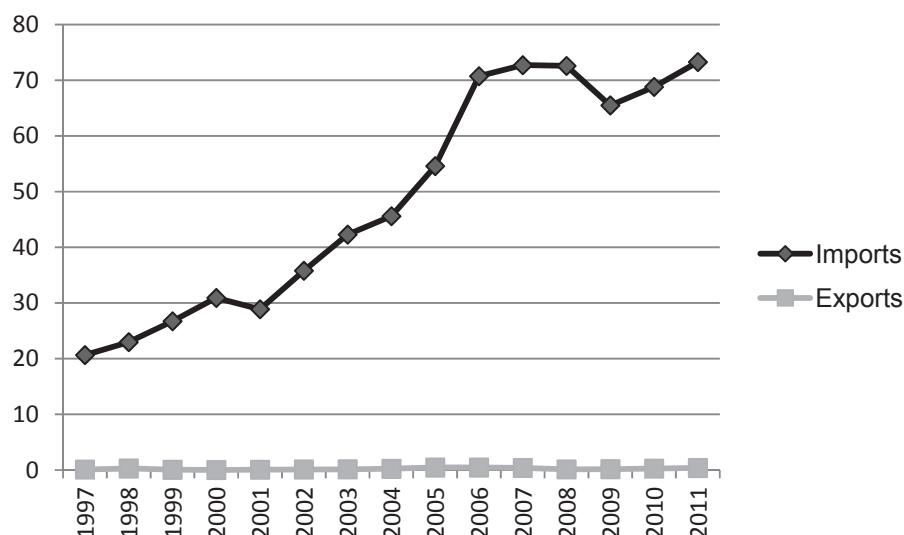
As a result, El Salvador has been the only country in the region that is not self-sufficient in meat. Although exact figures for domestic production are not available, it was estimated to satisfy only around 50% of the country's total consumption in 2008 and it has followed a declining trend from the last 20 years¹⁹. As a result, consumption relies heavily on imports. Most of them come from the CACM – specifically from Nicaragua, which has a highly competitive industry by international standards (Ángel, 2012). Figure 15 shows the evolution of imports and the country's main importers of meat products.

Considering this situation, a tariff reduction may not have the anticipated negative impact in the sector. Although low scale production and the lack of sophisticated processes make the local producers less able to compete against foreign firms, El Salvador's beef sector is already liberalized in practical terms because of free trade with Nicaragua (and other highly competitive regional producers, like Costa Rica and Panama), whose products have already saturated the local market (Ángel, 2012). In these conditions, a high MFN tariff is no longer an

¹⁹ Estimations made using data from MAG (2011) and SIECA (2012 a). Domestic production was calculated subtracting cattle imports from the total production of domestic slaughterhouses. It ignores illegal introduction of animals to the country, a common practice carried out to avoid non-tariff duties. Therefore, it may overestimate the contribution of local products to meet consumption.

effective tool to protect domestic production and its reduction is not expected to have a significant effect.

Figure 15
Imports vs. Exports of Beef Products (1997-2011) (Millions of US\$)



El Salvador's beef imports by country (2011)

Country of Imports	Meat (Fresh)	Meat (Frozen)	Other Meat Preparations	Meat Preparations (Sausages)	Total by Country	%
Nicaragua	\$ 43,023,269	\$ 5,719,237	\$ -	\$ -	\$ 48,742,506	66.5%
Guatemala	\$ 8,634,301	\$ 3,082,277	\$ 1,660,318	\$ 138,799	\$ 13,515,694	18.4%
Honduras	\$ 3,318,874	\$ 477,008	\$ -	\$ -	\$ 3,795,882	5.2%
Panama	\$ 560,790	\$ 2,324,164	\$ 24,342	\$ -	\$ 2,909,296	4.0%
Costa Rica	\$ 1,954,023	\$ 386,411	\$ 488,892	\$ 67,370	\$ 2,896,696	4.0%
USA	\$ 428,414	\$ 943,611	\$ 8,114	\$ 20,887	\$ 1,401,026	1.9%
Mexico	\$ -	\$ -	\$ 12	\$ 14,819	\$ 14,831	0.0%
Total by Product	\$ 57,919,672	\$ 12,932,707	\$ 2,181,677	\$ 241,875	\$ 73,275,931	100.0%

Source: Author's calculations using data from BCR (2012 a)

4.5.1.4. Rice Sector

Rice in El Salvador is produced by approximately 4,000 owners of small plots. They harvest and sell the product complete with hull and bran layers (also known as “paddy rice”) to mills, where is processed and packed for wholesale or retail trade. Only a small percentage of the harvest is kept by the producers for self-consumption (Superintendencia de Competencia, 2009).

Local production is not enough to meet the country’s demand. Approximately 70% of total rice consumption in El Salvador comes from imported paddy rice (mostly from the US), which is later processed by local mills. In order to protect domestic production, an agreement between producers and mill owners was signed in 2000, called *Convenio Permanente para la Comercialización de Arroz Granza Nacional (CPCAGN)*. This agreement promotes local trade by reducing intermediary costs and agreeing on purchasing conditions among the signatory parties. Additionally, in order to access foreign duty-free quotas, mills have to fulfill a performance requirement which consist in the acquisition of domestically-produced paddy rice through this channel. However, due to the “lack of formality of many producers (...), as well as their persistence to sell their product to traditional intermediaries” (Superintendencia de Competencia, 2009, p.138), around 26% of the domestic production was commercialized outside the procedures of the agreement in 2009 (Ángel, 2010). Furthermore, the prices they receive for they products within the CPCAGN is still lower than the price mills pay for imported rice, which includes tariffs (Ángel, 2012). This implies protection within the agreement is limited, and domestic producers are still vulnerable against further competition from foreign producers.

Figure 16
Anticipated Impact of Proposed CETs Establishment on Products within the Rice Sector

Sector	Product	Current Weighted Average Tariff	Weighted Average CET	Imports in 2011 (FOB)	Estimated Change in Imports	% Change Imports	Estimated Change in Tariff Revenue
Rice	Paddy rice	40.0%	10.0%	\$ 27,295,681	\$ 5,790,672	21%	\$ (7,609,637)
	Broken rice	40.0%	15.0%	\$ 3,698,990	\$ 2,809,064	76%	\$ (503,388)
	White Rice	40.0%	15.0%	\$ 3,928,281	\$ 1,388,060	35%	\$ (773,861)
	Other	40.0%	15.0%	\$ 7,323	\$ 908	12%	\$ (1,695)
	Rice Total	40.0%	11.1%	\$ 34,930,275	\$ 9,988,703	29%	\$ (8,888,581)

Source: Author's calculations using data from BCR (2012 a) and Kee et al. (2008)

Figure 16 shows the detailed effects for each product within the sector. In absolute terms, the greatest increase in imports comes from paddy rice, reaching \$5.8 MM (21% growth), which would affect directly the local production. Imports of processed rice display even higher percentage changes (76% for broken rice and 35% for white rice), amounting to a total of \$4.2MM, which would impact negatively both producers and the domestic milling industry.

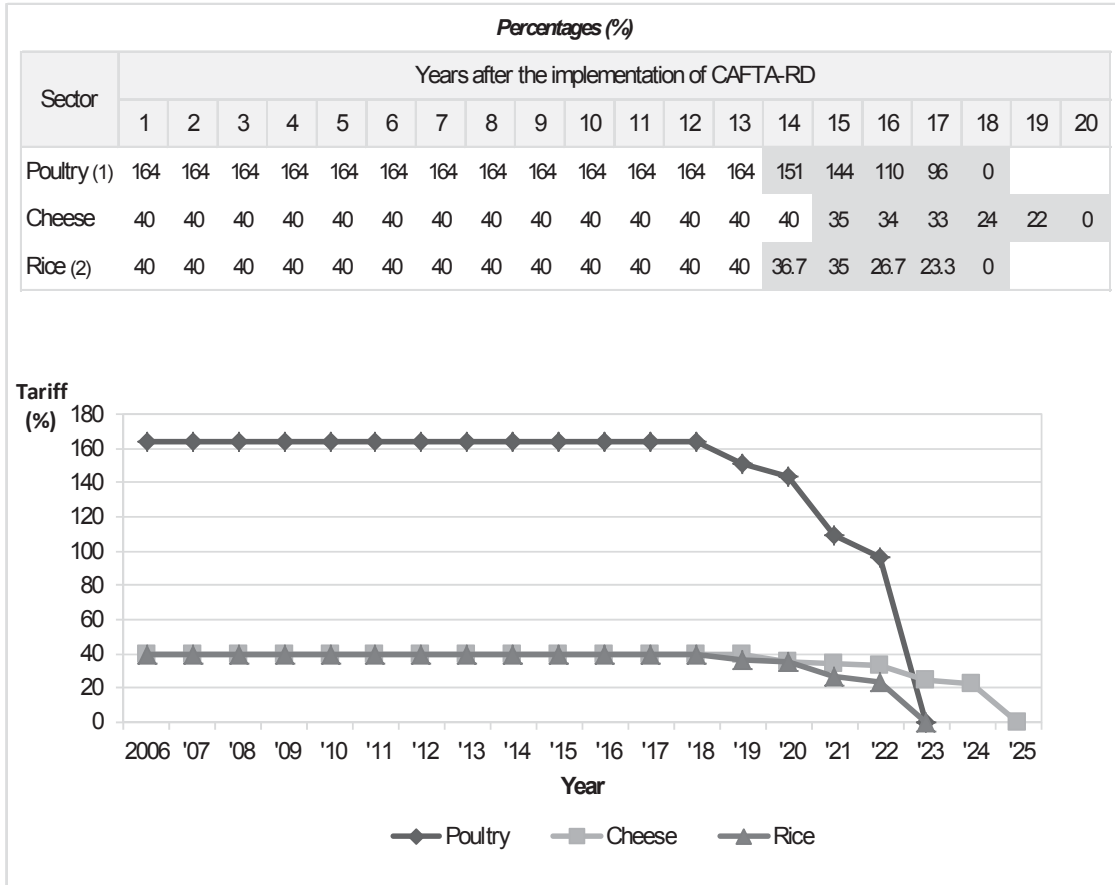
Given the vulnerable situation faced by most local producers due to their small size, absence of coordination and overall lack of competitiveness, the reduction on tariffs would reduce prices on paddy rice, pushing them away from the market. Protection from the CPCAGN would be diminished as performance requirements for duty-free imports lose relevance because of lower tariff rates. The impact on mills is ambivalent: they could be affected from the increase on imports of final rice, but would also benefit from cheaper paddy rice to process.

4.5.1.5. Is Tariff Protection for Sensitive Products Sustainable within the CAFTA-DR Framework?

Economic liberalization and tariff reduction in El Salvador is a process that goes beyond the discussion of the establishment of a Customs Union with its neighboring country. Since the 1990s, the country has undertaken an aggressive liberalization strategy through bilateral trade agreements and unilateral tariff reductions. The most important trade contract recently signed is CAFTA-DR, a bilateral/multilateral agreement between the US and Central America and the Dominican Republic, implemented in 2006. The consequences of such an agreement for the Salvadoran economic structure are weighty. The tariff schedule agreed within CAFTA-DR's framework will effectively liberalize the sensitive segments that have been analyzed. The US production is especially competitive in poultry (because of lower prices for dark parts due to American consumer preferences), beef (the US is the number one producer in the world) and rice (almost 100% of Salvadoran imports on rice come from the US).

Tariff elimination for most agricultural products was settled to take place either immediately or within periods of 5-10 years after the implementation of the agreement. Nevertheless, liberalization process for sensitive agricultural products was established within longer periods (15-20 years) and the method usually includes a combination of tariffs and non-tariff instruments (MINEC, 2004). Figure 17 shows a detailed table of the tariff liberalization process for these sectors.

Figure 17
El Salvador's Tariff Schedule for Selected "Sensitive Sectors" within CAFTA-DR Agreement



Source: Author's elaboration based on data from ECLAC (2004)

(1) Poultry includes only Dark Parts (2) Tariffs for rice are effective both for paddy and processed rice

Tariff for Beef starts at 15%, and would be completely eliminated on the 15th year. However, the detailed tariff schedule was not available.

As exhibited in Figure 17, tariff reductions for these products would be concentrated on the last years of the established periods, which results in a noticeably abrupt changes in rates – particularly for poultry's dark parts. However, *effective* liberalization takes place in a much more gradual way when the tariff-free quota schedule is considered, which works simultaneously with the tariff reduction program (Figure 18).

Figure 18
El Salvador's Tariff-Free Quota Schedule for Selected "Sensitive Sectors" within CAFTA-DR Agreement

Thousands of Metric Tons

Sector	Production (2003)	Total Imports (2003)	Years after the implementation of CAFTA-DR in 2006																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Poultry	78.6	0.0	0	0	.5	.9	1.4	1.9	2.3	2.8	3.2	3.7	4.2	4.6	TBD	TBD	TBD	TBD	TBD	Free		
Cheese	2.4	9.7	.41	.43	.45	.48	.50	.52	.55	.58	.61	.64	.67	.70	.74	.77	.81	.85	.90	.94	.99	Free
Beef	29.2	15.0	.11	.11	.12	.12	.13	.13	.14	.14	.15	.15	.16	.16	.17	.17	Free					
Rice (Paddy)	22.5	86.8	62	63	65	66	67	71	73	74	75	76	77	79	80	81	82	84	85	Free		
Rice (Proc.)	N.A.	3.7	5.6	6.0	6.4	6.8	7.1	8.1	8.4	8.8	9.1	9.4	9.7	10.0	10.4	10.7	11.0	11.3	11.6	Free		

Source: Author's elaboration based on data from ECLAC (2004) and Marques (2005)

(1) Poultry includes only Dark Parts

Poultry's Tariff-Free Quota from the 13th year will be defined as 5% of 2002 or 2012's production (the highest of both)

Highlighted cells show when free-tariff quotas become larger than imports from US in 2002, when CAFTA-DR was negotiated

The combination of these quantities, along with the reduction in tariffs, would constitute an effective way of progressively implementing liberalization in domestic sensitive sectors -with poultry being an exception²⁰.

The commitments already acquired in CAFTA-DR underline the fact that liberalization (and more specifically, tariff reduction) is a traced path for El Salvador. There is no turning back on this process, and it is only a matter of time until the protected sectors face international competition. The question, therefore, is not whether tariff reduction is *to be implemented*, but if doing so *in a shorter term* for a group of products –which would open the possibility of a Salvadoran-Guatemalan CU– offers more benefits than costs for El Salvador.

4.5.2. Consumers

In contrast to the potential detriment that a group of local suppliers may experience as a result of reducing import tariffs, a broad base of consumers would benefit from lower prices on food products. Figure 19 shows the most demanded foods products in El Salvador, measured by the percentages of households in each income level that include them regularly into their diet.

²⁰ The tariff-free import quotas for this sector can't be considered substantial, and would not have a large impact on the domestic market. It must be noticed that the agreement on poultry's dark parts (probably the most vulnerable sector) will be discussed again during year #9, in which an evaluation of the effects up to that point will determine the forthcoming rules on its trade and could further extend the SSM period.

Figure 19
Percentages of Households that Include the Product in their Regular Diet, Segmented by Income Level

Ranking	Product	Extreme Poverty	Relative Poverty	Non-Poor
1	Com Tortillas	98	97	92
2	Bread	80	88	90
3	Pastries	81	87	87
4	Eggs	91	93	85
5	Cheese	78	85	84
6	Tomato	89	86	82
7	Rice	88	86	72
8	Dehydrated Soups	79	80	70
9	Beans	88	81	73
10	White Sugar	83	80	66
...	...			
12	Poultry	62	73	77
...	...			
22	Beef	21	37	51
...	...			
27	Fish and Seafood	43	43	47
28	Milk	21	34	45

Source: Menchú and Méndez (2011) using 2006 data from ENIGH

As Figure 19 shows, most of the affected products are very important on the dietary habits of the Salvadoran people. Cheese and rice among the top ten foods on the list, with an exceptionally high percentage of households from all economic segments consuming them regularly. Interestingly, rice consumption exhibits an inverse relation to income level, implying that a drop in prices in such product should benefit poorer people to a larger extent. Poultry is the highest consumed type of meat in the list by all income levels. Beef consumption shows a strong direct relation to income level, although this may change if the price falls.

This data gives a broad idea of the impact of the reduction of tariffs for Salvadoran consumers. Taking into account how important these particular products are in the country's dietary patterns, as well as the sensible drop on prices they would experience if their high tariffs are reduced, the expected benefits Salvadoran consumers are very high and should not be neglected²¹.

²¹ Marques (2005) arrives to a similar conclusion when trying to measure the effects of the social impact of a tariff reduction for sensitive sectors under CAFTA-DR. He finds tariff liberalization of these products would benefit a wide base of households (consumers) and harm only marginal number of them (producers).

4.6. Summary and Additional Remarks

In order to summarize and compare the anticipated effects of the implementation of the proposed set of CET, the most important information has been included in Figure 20.

Figure 20
Summary of Anticipated Impact of Proposed CETs Establishment by Economic Sector

Economic Sector	Sub-Sector / Supply Segment	Level of Protection	Affected Sub-Sector(s)	Affected Actors	Anticipated Effect	Remarks (Market Power, Competitiveness...)	Liberalization Scheme under CAFTA-RD	Consumer Base
Poultry	Artisanal	Very high	Industrial	Reduced number of big firms (3 biggest represent 70%). 9,000 direct employees.	Very negative due to big differences in prices in poultry's dark parts	Overall well functioning, competitive market	Low levels of increasing quotas. Tariff elimination in 2023). Agreement to be revised in 2014	Broadly consumed although directly related to income level. However, most important type of meat for all income levels
	Industrial							
Cheese	Artisanal	High	Industrial	8 Big processing firms (to some extent, also semi-industrial producers)	Negative. although local product differentiation may lessen the impact	Non-competitive market. Few big players impose high prices. Counterproductive protection	Moderate levels of increasing quotas. Tariff elimination in 2025 (reductions starting 2020)	Intensively consumed by all income levels
	Industrial							
Beef	Double-purpose cattle Dairy cattle (Discards)	High	-	-	Not substantial. Sector is "effectively" liberalized	Fragmented, low technological procedures result in relatively higher prices.	Moderate levels of increasing quotas.	Less important in the country's eating habits- Mostly consumed by better-off households
Rice	Artisanal Producers Mills	High	Artisanal Producers	4,000 small plots owners	Negative. Foreign rice sensibly cheaper. No real protection from CPCAGN	Fragmented, low technological procedures result in higher prices. Sector additionally protected by performance requirements	Moderate levels of increasing quotas. Tariff elimination in 2023(reductions starting 2019)	Intensively consumed by all income levels, particularly poor segments

Source: Author's elaboration based on data previously presented

An additional cost of the tariff disparity among the countries is the opportunity for trade deflection. This situation neutralizes the tariffs' protection aims and increases the government's administrative costs as it demands a much stricter control over the products' origin. Many cases of trade deflection within the CACM (and specifically, between Guatemala and El Salvador) have been denounced. For instance, in the late 1990s, El Salvador accused Guatemalan firms of practicing triangulation with processed rice imported from the US at a lower tariff; however, the origins of the rice could ultimately not be determined (Ángel, 2011). Another case took place in 2006, when Guatemalan authorities announced the establishment of a 15% tariff to poultry's dark parts coming from the US as the rest of the CACM's nations settled it at 164%; Salvadoran authorities immediately complained, as they feared US poultry would find its way into the country as a Guatemalan product or through smuggling.

As a final remark, it should be noticed that, although of relative importance within El Salvador's current economic structure, none of these sectors can be considered a key component for the country's sustainable development. Long-term protection on traditional agricultural areas may indeed be very costly for the country, both in terms of higher prices for consumers, as well as inefficient resource allocation – for example, the new labor demands created by the important growth of exports on non-traditional agricultural products due to liberalization, which may be only partially met by the wrong signaling of unreal, protected prices. Moreover, prolonged sheltering of these sectors may come at the expense of protection for higher value- added, more capital intensive industries that need to be promoted in order to raise overall productivity.

5. The Impact of the Elimination of Rules of Origin

5.1. Literature and Previous Studies

In contrast to an FTA, trade and movement of goods within a CU are based on the principle of “free circulation” instead of “originating status” (Georges, 2007). This implies that once a product enters the union, it can move freely within its territory. Consequently, RoO become irrelevant when shifting to a CU system.

The literature tends to focus on the effects of the implementation of a CET when analyzing the consequences of shifting from an FTA to a CU; the elimination of RoO among countries has been neglected until recently (Krishna, 2004). This is explained, in part, by the complexity involved to include their effects into CGE models, the most popular tool used in these studies (Georges, 2007). Although its distortionary effects can be hard to measure, some studies have tried to estimate the costs they impose to the economy. For instance, Georges (2007) analyzes the effects of moving from NAFTA to a CU regime for Canada. Using a CGE model, Georges predicts a permanent increase in Canadian real GDP of 0.9% (of which 0.7% corresponds to the RoO elimination effect alone). Administrative and compliance costs can also be substantial. Cadot et al. (2002) estimates NAFTA’s RoO administrative costs represent approximately 2% of Mexican exports to the US. Herin (1986) finds that RoOs compliance costs led more than 25% of the exports within the European Free Trade Association (EFTA) to pay the MFN tariff instead of dealing with the documentation to prove its origins.

5.2. Overview of the Situation

RoO guidelines, applicable to free trade within Central America, are established in the *Reglamento Centroamericano sobre el Origen de las Mercancías*. This document describes two ways in which the origin of a product is attributed to a country: if the good is completely produced within its territory or if a “substantial transformation” took place in it. The main criterion for substantial transformation is a Change in Tariff Classification (CTC)²². The required CTC depends on each product and ranges from minor variations (changes of item classification within subheadings) to substantial ones (changes of chapters). Additionally, a

²² Based on the SAC (*Sistema Arancelario Centroamericano*) tariff classification list.

technical requirement is necessary in some cases to fulfill the transformation condition, and some exceptions in the required inputs may also apply. Figure 21 shows the structure for the CTC criterion in the CACM, by percentage of products.

Figure 21
RoO combinations in CACM by percentage of total products

Criterion	Alone	+ Technical Requirement	+ Exceptions	Total
No Change	-	-	-	0.0%
Change of Item	0.2%	-	-	0.2%
Change of Subheading	30.2%	0.9%	0.2%	31.3%
Change of Heading	37.6%	0.5%	6.7%	44.8%
Change of Chapter	21.1%	-	2.6%	23.7%
Total	89.1%	1.4%	9.5%	100.0%

Source: Estevadeordal et. al (2009)

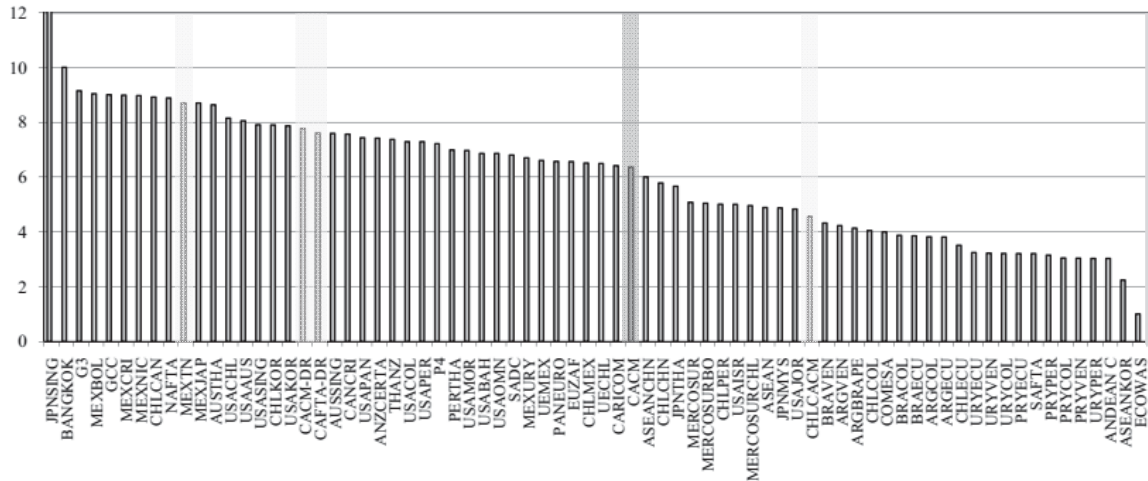
The document prescribes that substantial transformation can also be achieved through the Regional Value Content criterion, which is based on two principles. The first one is “Minimis”, which prescribes that foreign inputs used in the production must represent less than 10% of a good’s final value; the second is “Accumulation”, by which regional inputs can be accumulated in the production process as originating.

5.3. Data

To provide insight regarding the costs from the RoO applied in the CACM, two aspects of the current framework will be analyzed: its restrictiveness and its complexity.

A RoO is more restrictive as its requirements for granting originating status are more demanding, such as significant transformation of the products, decreased use of inputs from outside the accumulation zone or complex technical requirements (Estevadeordal et al., 2009). Thus, restrictiveness can give an idea of the distortionary potential of the RoO structure. Harris (2007) presents a restrictiveness index based on the magnitude of changes required for a product to be considered originating (it does not consider, however, the effects of the *minimis* and accumulation principles). The values of this indicator for selected FTAs are shown in Figure 22.

Figure 22
Comparison of Restrictiveness of RoO in selected FTAs



Source: Estevadeordal et al. (2009) based on Harris (2007)

Dark gray: CACM. Light gray: Other regional FTAs.

As seen in Figure 22, the CACM’s level of RoO restrictiveness value is average compared to other FTAs in the world and stands below most FTAs signed by El Salvador and Guatemala, including México-Northern Triangle, CAFTA-DR and CACM-DR.

However, the index only measures the “observed” restrictiveness of the RoO, that is, the distortionary *potential* it has based on its characteristics, not its real effects. Effective restrictiveness depends on how the set of RoO actually constrains trade or increases the production costs by changing the firm’s inputs decisions for higher-priced regional options to qualify for tariff preferential treatment. How binding the RoO structure is, depends on the competitiveness of the members in the relevant inputs to the regional industries²³ (Estevadeordal et al., 2009).

Although such evaluation would require an in-depth analysis of the production chain of all traded products within El Salvador and Guatemala, it is still possible to gain an idea of the RoO effective distortionary effects. The limited domestic availability of materials for manufacturing

²³ RoO requirements for a specific product against two countries may be equally strict, but not equally restrictive in effective terms. For example, a requirement to use locally grown cotton for cotton shirts to qualify for free trade is much more restrictive if it is established for Canada (with no relevant cotton production) than for Brazil (one of the world’s major producers).

and the substantial magnitude of trade between the two countries (which increases the potential benefits of reaching a tariff preference) are factors that add to the RoO distortionary potential. However, the RoO structure is not considerably restrictive, the small size of the markets makes it less attractive for firms to make drastic changes in investment flows because of tariff preferences, and both the *Minimis* and accumulation principles (especially since the latter was expanded by the CAFTA-DR multilateral scheme²⁴) reduce the overall rigidity of the CTC criterion. As a result, although the RoO may have a distortionary effect, the costs related to it are clearly not significant.

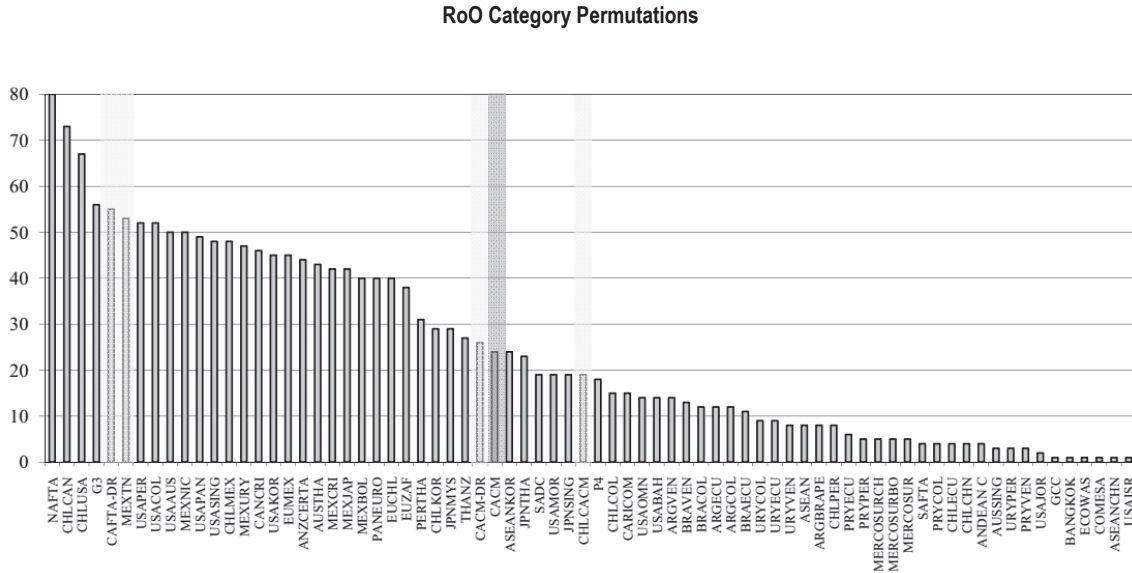
On the other hand, RoO complexity generally leads to an increase in administrative costs for the government (particularly customs authorities) and compliance costs for the traders. In order to measure the complexity of the CACM RoO, two indexes will be analyzed. The first one is *RoO permutations*, which accounts for the number of different requirement combinations (CTC, Technical Requirements, Exceptions and other criteria) in the RoO structure. The second is *RoO selectivity*, which measures the standard deviation of RoO requirements within products (See Figure 23).

As Figure 23 shows, the CACM's RoO structure is relatively simple compared to other FTAs – particularly among the rest of the regional agreements. The predominant use of the CTC criterion, paired with technical requirements and inputs exceptions only in a small group of cases, results in a generally straightforward and uncomplicated system.

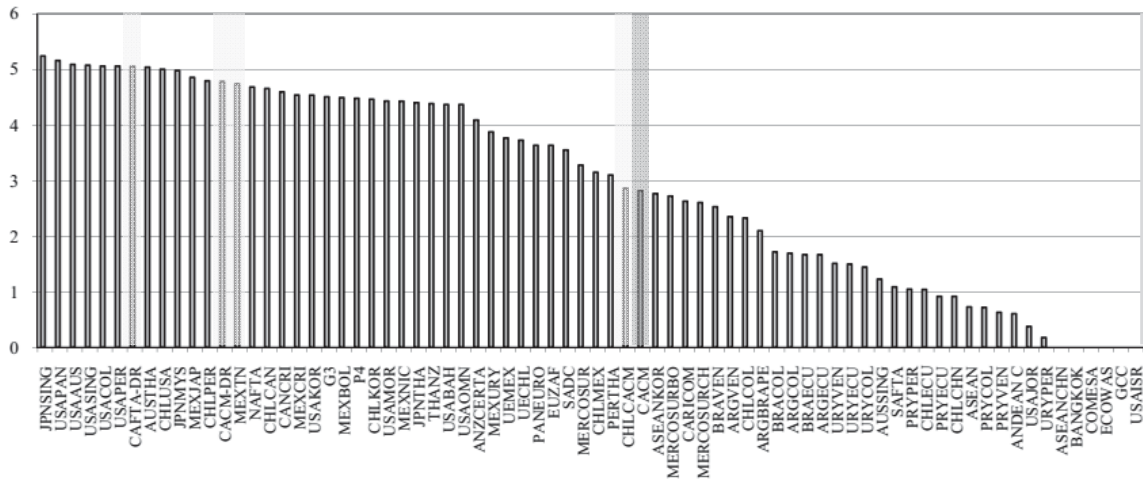
However, the CACM is just one among a large number of FTAs signed by El Salvador and Guatemala, most of them contracted since the 1990s. As stated before, FTA proliferation may lead to a confusing trade framework for firms and public institutions (the “Spaghetti Bowl Effect”), which multiplies both compliance and verification costs. However, since the establishment of the CAFTA-DR, an important number of Salvadoran exporting firms have changed their production chain to meet exclusively its RoO requirements (Flores and Guth, 2012). This happened because the US is the country's main export destination, and sustaining many product lines was not cost-efficient. Moreover, since CAFTA-DR's conditions are highly restrictive (particularly compared to CACM's), the companies are able use this line to export within Central America, the Dominican Republic and other countries with less constraining requirements.

²⁴ With the implementation of CAFTA-DR in 2006, materials and intermediate goods from the US and Dominican Republic qualify as originating when trading within the CACM.

Figure 23
Comparison of Complexity of RoO in Selected FTAs



RoO Selectivity (Standard Deviation) within Products



Source: Estevadeordal et al., (2009).

Dark gray: CACM. Light gray: Other regional FTAs.

This situation, although effective to deal with the “spaghetti bowl” effect, has an important distortionary effect, as a significant percentage of Salvadoran exports to Guatemala (and Central America) comply with an overly restrictive set of RoO. However, it is unlikely that the

abolition of RoO with Guatemala results in important changes in the firms' production lines to correct such a distortion, particularly because its requirements are already relatively unrestrictive.

In summary, a change from the Salvadoran-Guatemalan FTA to a CU would not have a big impact on efficiency by modifying local firms' input selection, given the relatively low effective restrictiveness of the RoO structure. However, it could reduce administrative and compliance costs considerably – not because CACM's RoO are particularly complex, but because of the important amount of trade that takes place among the countries.

6. The Impact of the Abolition of Customs Controls

6.1. Literature and Previous Studies

Although most of the literature on moving from an FTA to a CU usually refers to the “gains in efficiency” derived from the reduction of customs-related transaction costs (CRTCs), such benefits are not analyzed profoundly in these studies. This could be because their quantification is a complex process, given the multiple factors to take into account and the length of their scope. However, with the general reduction of tariff barriers in international trade, CRTCs have gained relative importance in the trade dynamics among countries (Walkenhorst and Yasui, 2003), and have sometimes become the main problem for exporting and importing firms. Therefore, some studies have tried to analyze further their effects on trade; however, empirical work on this topic is still scarce.

CRTCs are commonly divided in two groups: Direct and indirect. The first include compliance costs (paperwork) and charges for customs services²⁵, while the latter refers to costs generated through procedural delays, loss of business opportunities and the system’s unpredictability (OECD, 2002). The economic relevance of these costs depends on the number of transactions carried out and the size of firms that execute them (small companies may be more affected because of economies of scale in CRTCs) (Verwall and Donkers, 2001).

The significance of these costs is supported by empirical evidence. For instance, Cecchini, Catinat and Jacquemin (1988) estimated the total of CRTCs in the EU –both direct and indirect – to be around 8 billion euro, or 2% of trade value within the region. The results also revealed that smaller firms faced CRTCs up to 45% higher. US NCITD (1971) estimated costs of requested documentation in the US to reach 7.5% of the total value of export and imports. WTO (1998) shows a study in which transport delays due to customs formalities represent up to 7% of total transport costs in western European countries, and up to 29% in Central and Eastern Europe.

There is no report that tries to measure the magnitude of costs due to CRTCs between Guatemala and El Salvador. The purpose of this study is not to quantify these costs, but to

²⁵This concept overlaps with ROOs compliance costs in most of the studies.

analyze the issue in more depth and give a useful idea of the impact of CRTCs in the Salvadoran economy.

6.2. Overview of the Situation

Exchange of goods between El Salvador and Guatemala takes place almost exclusively by land²⁶. There are four land custom borders between the countries, as shown in Figure 24. Three of them are juxtaposed, which means each country holds its own customs office, but their processes are coordinated. In contrast, *Valle Nuevo- Las Chinamas* is an integrated custom, implying a single office in which agents from both countries execute all controls.

Figure 24
El Salvador Peripheral Customs Borders



Source: Author's elaboration based on Puga Carbajo (2005)

In both El Salvador and Guatemala, the private sector's complaints over CRTCs are frequent. According to the Salvadoran Exporters Corporation (COEXPORT), "the problems around customs procedures are among the most recurring obstacles to Salvadoran exporters" (Pastrán, 2011). Overblown compliance costs, as well as unexpected delays that can last for hours are consequences of a group of factors that companies and development institutions have denounced for years, particularly because of the important flow of trade among the two countries.

²⁶ According to López (2012), 96.4% of total exchange between both countries takes place by this means.

One of the most denounced problems by the private sector is the arbitrariness and discretionary decisions taken by the customs authorities. In 2011, the Salvadoran Association of Industry (ASI) revealed a poll in which more than 400 firms attributed part of the sector's low growth on the discretionary decisions and unjustified documentation requests and charges from customs agents (Molina, 2011). The Salvadoran Association of Cargo Transporters (ASETCA) declared arbitrariness is part of their daily interaction with customs authorities, which results in a powerful non-tariff trade barrier (Hernández, 2011). According to COEXPORT, discretionary pronouncements take place even in highly technical and well documented issues, such as RoO requirements. They propose the use of permanent monitoring systems; USAID complements the initiative with transparency programs and a code of conduct for customs agents (Quintanilla, 2010).

The lack of an efficient and reliable information system is also a common complaint. System crashes are a frequent cause of delays in the custom process, as pointed out by transporters (Gamarro, 2012; Hernández, 2011). Part of the problem comes from the lack of training for customs agents, which prevents them from using the technological tools effectively (Hernández, 2011). A scandalous episode took place in 2012, when ASETCA denounced that continuous crashes and errors in the customs' information system led Guatemalan authorities to falsely accuse Salvadoran transporters of fiscal evasion (Velasco, 2012).

The structural issues that underlie these problems include the absence of appropriate infrastructure, proliferation of disparate trade conditions against different blocks due a constant increase in trade agreements and general lack of resources, which makes it difficult to increase the number of agents and supervisors.

The countries' governments are not ignorant to this situation. In fact, El Salvador's Minister of Economy, Armando Flores, while discussing trade among El Salvador and Guatemala, declared: "We are aware that the current processes in border customs hinder trade and take time away from the citizens of our countries, but we are convinced that, with joint efforts, these obstacles will be overcome" (Portillo, 2012). During the last 20 years, numerous efforts to make customs transactions simple and efficient have been made. Although noticeable improvement in some areas has been achieved, new issues have emerged and CRTCs remain high²⁷.

²⁷ A good example is the implementation in recent years of the *Proyecto de Tránsito Internacional de Mercancías* (TIM), an aggressive plan to simplify customs procedures and reduce their time length by making use of new technologies and redesigned clearance processes. Initial results were promising, bringing clearance times from 61 to 8 minutes in the customs where it was implemented. However, these periods have increased

6.3. Data

De León (2011) documents a normal customs clearance process at the *Pedro de Alvarado-La Hachadura* border – the most important customs border between El Salvador and Guatemala in terms of number of operations (Puga Carbajo, 2005). It should be noted that, as a juxtaposed customs border, cargo trucks entering Guatemala from El Salvador receive only a minor check in *La Hachadura*, and then they move forward to *Pedro de Alvarado* where the customs controls take place. The opposite applies for goods coming from Guatemala. Figure 25 shows the steps and clearance times in both customs, with detailed amounts of time for each phase of the process.

Figure 25
Clearance Time in Pedro de Alvarado- La Hachadura Customs Border

Phase	Time (minutes)	
	Guatemala (<i>P.d.Alvarado</i>)	El Salvador (<i>La Hachadura</i>)
Entry control	-	3
Review of documents	10	10
Permit Requirements	30	30
Selectivity Criteria	5	-
Physical Revision	5	-
Police control	-	<i>Up to two hours</i>
Confirmation in transit booth	3	4
Exit check	-	3
Clearance process subtotal	53	50 - 170
+ Vehicular congestion	<i>Up to one hour</i>	
Total Clearance Time	53-113	50- 230

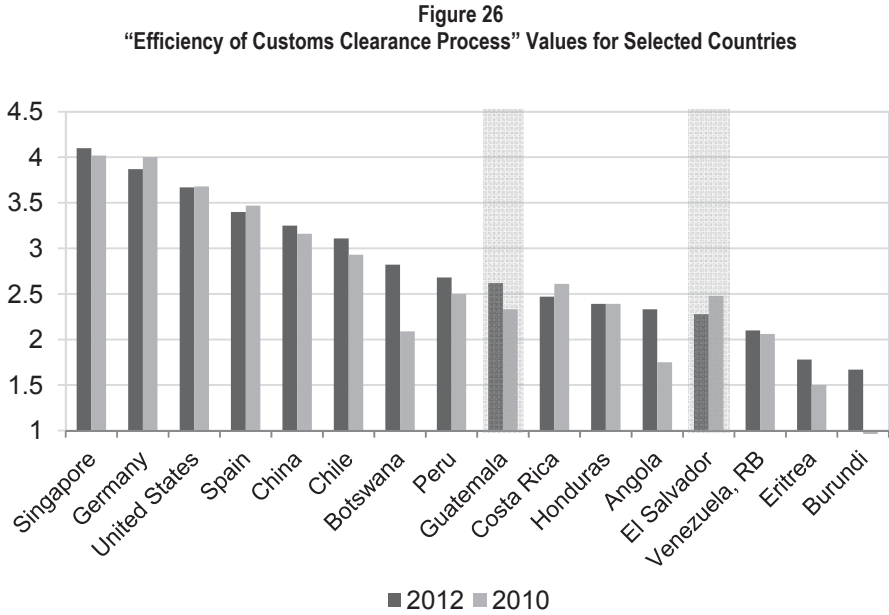
Source: Author's elaboration based on data from De León (2011)

As shown in Figure 25, the average time for freight transport to cross the border from El Salvador to Guatemala is almost one hour, and it can double if the custom faces vehicular

up to 90 minutes in some borders due to inadequate infrastructure and its coexistence with non-TIM processes, which results in confusion and incompatibilities (De León, 2011).

congestion. The situation is even worse for units crossing from Guatemala to El Salvador, where police control can increase the total clearance time up to almost 4 hours. It should be noticed that any problem with the customs' information system would increase these times even further.

Up until recently, customs' efficiency could not be easily compared among countries. In 2007, the World Bank calculated for the first time an international index that seeks to measure the efficiency of customs clearance and border management. It is based on surveys in which private entities evaluate the speed, simplicity and predictability of formalities in the customs clearance processes. The final scores range from 1 (very low efficiency) to 5 (very high). Figure 26 shows the results for the last two reports in selected countries.



Source: Author's elaboration based on data from World Bank (2012 a)

El Salvador ranked 114th out of 155 countries in 2012, which represents a big fall from the 67th position it achieved in 2010. According to the study, among the main sources of delays are "informal payment solicitations" and "pre-shipment inspections" (World Bank, 2012 b). In contrast, Guatemala exhibited a small improvement and is now placed 68th. These figures corroborate the private sector's complains discussed before and show the level of inefficiency of the customs processes within these countries. Moreover, prospects for improvement in the

short and medium terms are unclear, especially because many of the aggravating factors, such as poor infrastructure, lack of resources and corruption cannot be easily fixed.

It is important to mention that the efficiency gains of the implementation of the CU for El Salvador would go beyond the reduction of CRTCs within its trade with Guatemala. The road system that serves as the main link between Mexico and the Central American countries, known as the “Central American Corridor”, reaches El Salvador through the *Pedro de Alvarado- La Hachadura* customs border. Consequently, with unrestricted access to Guatemala through the corridor, El Salvador would have much easier access to the Mexican and Belizean markets, stimulating further trade with these nations.

In summary, transaction costs in customs faced by exporters and importers in El Salvador are substantial and represent an important problem for the private sector. The abolition of customs controls would eliminate the extent of these costs for transactions with Guatemala (El Salvador’s second most important trading partner) and would significantly reduce those related to land trade with Mexico and Belize²⁸. Therefore, the efficiency gains and trade promoting potential of such policy represent huge benefits for the country.

²⁸ It should be noted, however, that complete abolition of customs controls requires the elimination of the mutual protective measures for raw coffee and sugar granted in the “A” Annex of the TGIEC, as well as the establishment of common external tariff (or policy) for these products.

7. Conclusion

This study has analyzed the impacts of implementing a CU with Guatemala on the Salvadoran economy, based on the three main implications of this process: CET establishment, RoO elimination and customs control abolition. This section presents the main findings on each area, as well as recommendations for further studies.

The first element, CET establishment, entails tariff harmonization on 341 products. The proposed scenario is based on the parameters agreed by El Salvador within the CACM framework. By estimating the effects of implementing this set of tariffs, four sectors emerge as negatively affected: poultry, cheese, beef and rice. However, after a comprehensive analysis of each sector, only poultry and rice seem to face a vulnerable position against such policy. On the other hand, consumers' gains due to price reductions on these goods are substantial, and so is the decline on costs associated with trade deflection. Lastly, none of these sectors represent a decisive factor on the country's path to economic development. Moreover, prolonged protection for these activities comes at the expense of promoting higher value-added industries.

The elimination of RoO is not expected to have an important effect on the Salvadoran economy. The current structure is relatively unrestrictive compared to other FTA's signed by El Salvador, which leads one to think that the distortions on firm's input selection are not substantial. In terms of complexity, CACM's RoO do not exacerbate the "spaghetti bowl effect" that comes from FTA proliferation. The structure is relatively simple, with a small number of exceptions to the CTC criterion. However, given the magnitude of trade among both countries, the elimination of RoO could lead to a substantial reduction of administrative and compliance costs.

Finally, the abolition of customs controls is anticipated to significantly reduce transactional costs for traders that make use of any of the Salvadoran-Guatemalan borders. Poor infrastructure, deficient management of information systems, lack of resources and corruption make the customs processes between these countries highly inefficient. The efficiency gains of this policy are not confined to trade with Guatemala, but also with Mexico and Belize, by providing Salvadoran traders with unrestricted access to these nations' borders. However, complete abolition of customs controls would require the liberalization of the products within

the “A” Annex of the TGIEC (raw coffee and sugar), whose effects have not been analyzed in this study.

In summary, the accumulated benefits coming from a decrease of goods’ prices for consumers, reduction of administrative and compliance costs from the current system and increase in efficiency and predictability for a broad base of Salvadoran exporters and importers (among other factors), outweigh the loss of a reduced number of domestic producers that are negatively affected by a tariff cut.

Further issues still need to be addressed. First, the impact on the Salvadoran economy of liberalizing raw coffee and sugar with Guatemala, since this is necessary to effectively eliminate all customs borders between both countries. Secondly, an analysis of how much the anticipated external policy of the two countries matches together needs to be deeply analyzed. If these are compatible, they would benefit from the block’s increase of negotiation power against third parties; if not, the common external policy would be an obstacle to each country’s economic aims.

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