THE POLITICAL ECONOMY OF PROTECTION OF SOME "SENSITIVE" AGRICULTURAL PRODUCTS IN COLOMBIA

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Abstract

As part of a comprehensive structural reform agenda, in the early 1990s Colombia undertook an important trade liberalization program, mainly through a reduction in tariffs. In the last two decades the widespread use of non-tariff barriers and other trade protection measures have partially reversed the liberalization effort, particularly for some agricultural products considered to be sensitive. It is also the case that Colombia stands out as the one country in Latin America in which agriculture severely under-performed during the decade of high commodity prices, with a sectoral policy focused on protection rather than on providing public goods. This is particularly worrisome in the context of the Peace Agreement with FARC which, to be sustainable, requires a fast-growing and competitive agricultural sector. Of course, a country´s trade policy does not happen in a vacuum but is, rather, the result of complex political interactions among diverse interest groups. To shed light on the political economy of protection of sensitive agricultural products in Colombia, we analyze the cases of rice and sugar, two highly shielded products that weigh heavily on household´s consumption baskets and are part of complex value-added chains. Our analysis of secondary sources and more than 20 semi-structured interviews allow us to better understand the "why" of trade protection. We identify winners and losers and discuss the channels of influence of key players, including agricultural producers and their organizations, the food-processing industry, large economic conglomerates, congress, the media, and some highly politicized ministries. We also discuss the compensation mechanisms used in the few liberalization episodes that have taken place, including prominently the TPA with the U.S. We argue that agricultural producers are well-organized and supported by pressure groups such as "*Dignidades*" and carry more political weight than millions of disperse consumers and the downstream industry.

JEL classification: F14, Q17, P16

Key words: Colombia, trade protection, agriculture, political economy

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Resumen

Como parte de una amplia agenda de reformas estructurales, a comienzos de los años noventa Colombia emprendió un importante programa de liberalización comercial, enfocado principalmente en la reducción de aranceles. En las dos últimas décadas el uso extendido de barreras no arancelarias y de otras medidas de protección han reversado parcialmente el esfuerzo de liberalización, en particular para algunos productos agrícolas considerados sensibles. Colombia también se destaca como el único país de América Latina en el que la agricultura tuvo un desempeño mediocre durante la década de precios altos de los productos básicos, con una política sectorial enfocada más en la protección que en la provisión de bienes públicos. Esto es particularmente preocupante en el contexto del Acuerdo de Paz con las FARC el cual requiere, para ser sostenible, un sector agrícola competitivo y de rápido crecimiento. Por supuesto, la política comercial no ocurre en el vacío, sino que es, más bien, el resultado de complejas interacciones políticas entre diversos grupos de interés. Para arrojar luz sobre la economía política de la protección de los productos agrícolas sensibles en Colombia, en este documento analizamos los casos de arroz y azúcar. Ambos están fuertemente protegidos, pesan mucho en las canastas de consumo de los hogares y forman parte de complejas cadenas de valor agregado. El análisis de fuentes secundarias y de más de 20 entrevistas semiestructuradas nos permite entender mejor el "por qué" de la protección comercial. Identificamos ganadores y perdedores y discutimos los canales de influencia de jugadores claves, incluyendo a los productores agrícolas y sus organizaciones, la industria procesadora de alimentos, grandes conglomerados económicos, el Congreso, los medios de comunicación y algunos ministerios altamente politizados. También discutimos los mecanismos de compensación utilizados en los pocos episodios de liberalización que se han llevado a cabo, incluyendo especialmente el TLC con EE. UU. Mostramos que los productores agrícolas están bien organizados, apoyados por grupos de presión como las "Dignidades", y tienen más peso político que millones de consumidores dispersos y que la industria procesadora.

I. Introduction

In 1990 Colombia transitioned from an import substitution model to a more liberalized framework, the so called "*Apertura Económica*". The main pillars were a reduction in tariffs and an aggressive integration strategy. Notwithstanding some progress, after three decades of having launched the liberalization effort, Colombia remains a rather closed economy. According to the UN (COMTRADE), in 2016, per capita imports barely reached US$900, much lower than in Chile (US$3.200) and Mexico (US$3.100) and lower than in Argentina (US$1.200), Peru (US$1.100) and Ecuador (US$1.000). A similar picture emerges in the case of exports, with exportable supply heavily concentrated in fuels and mining. In the Latin American context, only Venezuela fares worse in this regard.

The 1990s reform failed to correct in a significant manner the anti-export bias of the import substitution policy it replaced. The manufacturing sector faced a significant tariff reduction, but non-tariff barriers (NTBs) and other protectionist measures have been put in place in several sub-sectors. Protection is particularly pronounced in some agricultural sub-sectors via tariffs and NTBs, and they have been either excluded from trade agreements or obtained long tariff phase-out periods (Nieto *et.al*, 2016). Transfers from consumers to agricultural producers are particularly high in refined sugar, rice, milk and poultry, mainly because of their Market Price Support (MPS) levels. Interestingly, the Trade Promotion Agreement with the U.S. (TPA) was the one scenario in which the liberalization process, albeit gradually, was intensified for so-called "sensitive" products.[2]

To be sure, Colombia´s complex geography and weak transport infrastructure does not facilitate international trade. Road density and paved roads are low compared to Latin America, not the most demanding benchmark. Railways are limited and navigability in the river network highly restricted (IDB, 2015). The quality of infrastructure is also weak (GCR, 2016). As a result, transportation costs are nearly twice those in Brazil and almost six times those in Peru (Yepes *et al.*, 2013). Even successful exporters such as the fresh-cut flower sector pay the most expensive freight per mile of any transported load in the world

[2] An agricultural product is deemed sensitive if it has the strategic importance of generating rural employment and legally occupying the territory, and highly vulnerable to imports (Fenalce, 2006). This last concept helps determine the sensitivity of a product based on the existence of subsidies and systematic support for its production in a trading partner.

(Arbelaez, *et al*., 2012). This situation not only complicates trade; in the context of this project, it empowers those who hold protectionist views and deem the domestic market as their main focus of attention. Although Colombia is a land rich country, it is one of the few in the region that did not take advantage of the recent commodity price boom,[3] a worrisome issue in the context of the Peace Agreement signed with FARC, which envisions agricultural development as a requirement for making peace sustainable. While land distribution is at the center of the accord, a review of the protectionist trade policy and its relationship with the sector's under-development are absent from the agenda.

In most middle-income countries an argument put forward when justifying protection to agriculture is that it is the inevitable consequence of protectionism in rich economies. In Colombia this argument is strengthened by the notion that 50 years of guerrilla warfare have brought misery to millions living in the country-side and made agriculture a challenging activity. While the security situation has certainly been a menace in some regions, it has been used as an argument in support of protection by a wide range of actors in the agricultural sector, even by some barely affected by the security situation.[4]

The "*Apertura*" process has been the subject of several academic endeavors from a political economy perspective (Cepeda, 1994; Urrutia, 1994; Beaulieu; 2000; and Edwards and Steiner, 2000 and 2008). While several studies have documented *the extent of protection* of agriculture (OECD, 2015; García, *et al.*, 2014; Anderson and Valdés 2008; Jaramillo, 2002) and a few have made meaningful contributions on *the effects of protection* on sectoral performance (Perfetti and Botero, 2018), not much has been written on the political economy of agricultural trade policy ---i.e. on the "*why" the protectionist trade policy in place*. Although García *et al.* (2014) and Reina *et al.* (2011) analyze the adoption of protectionist measures that benefit certain groups, and Urrutia (1991) and Langebaek (2002) discuss the private sector´s role in the policy-making process, they do not identify potential winners/losers or the use of compensation mechanisms. This project attempts to

[3] While in Argentina, Brazil and Peru the agricultural sector grew on average 3%, 3.5% and 4% during 2004-2014, respectively, in Colombia it expanded at an annual rate of only 1.8%.

[4] Not to mention that the drug trade has made "money laundering" a huge business, with smuggling the main vehicle for these purposes. Some sectors use the politically powerful if economically weak argument that unfair competition from smugglers justifies protection. Many people in business have claimed that higher tariffs are an important element in the fight against smuggling, in particular in textiles and footwear: ((https://www.portafolio.co/negocios/empresas/brahma-pisa-fuerte-tiendas-propias-85050; https://www.portafolio.co/negocios/empresas/discusion-aumento-aranceles-sector-calzado-90322); http://elnuevosiglo.com.co/articulos/5-2013-agridulce-los-aranceles-para-calzado-y-textiles).

fill that gap by focusing on two products, rice and sugar. Along with other products such as milk, poultry and palm oil which we plan to address in a future expansion of this project, rice and sugar are among the most protected and weigh heavily in the consumer basket. We will also analyze the TPA negotiations identifying the roles played by private and public sector actors, members of congress and U.S. actors in the one meaningful effort to somewhat reverse the protection of certain "sensitive" products.

The paper is organized as follows: after this introduction, the second chapter describes trade policy following the 1990s liberalization effort. We place emphasis on protection of agriculture, describe the protection mechanisms and illustrate the sector's under-performance. The third chapter addresses the political economy of protection of some "sensitive" agricultural products. We identify the actors involved in the trade policymaking process and discuss the political economy issues surrounding the protection of two important products, rice and sugar. We devote the last section to explaining how a more liberalized outcome with respect to rice and sugar as well as other sensitive products was reached in the TPA. The final chapter provides conclusions and recommendations.

II. Setting the stage

A. Three decades into "*Apertura*", trade liberalization remains elusive

The trade liberalizing policy implemented in the early 1990s sought to correct the failures of an import substitution model which had fostered concentrated property structures, low productivity, high prices, few incentives for innovation and an anti-export bias. Liberalization comprised reducing tariffs, eliminating quantitative restrictions to imports (QRs), simplifying procedures, institutional reforms and the negotiation of several trade agreements (Hommes *et al.*, 1994). The Ministry of Foreign Trade (MoFT)[5] was established to coordinate and execute foreign trade policy with Incomex responsible for dealing with unfair trade practices[6]. Several entities assumed technical and administrative

[5] In what follows, MoFT stands for the Ministry (or the Minister) of Foreign Trade; likewise, MoF for the Ministry (or Minister) of Finance; MoA for Agriculture; MoH for Health.

[6] Since the 60s, Incomex had been in charge of managing import licenses. QRs were the main policy instrument, tariffs having a lesser role (García, *et al*., 2014).

responsibilities and today there is a complex institutional framework, making coordination difficult and facilitating capture by interest groups (García, *et al*., 2014).

The MoFT prioritized an agenda that sought active participation in the multilateral trade agenda, deepening regional integration and search for new trading partners. The most significant processes of regional integration were the strengthening of Andean integration, the negotiation with Mexico in the context of the Group of Three (with Venezuela), and the deepening of an agreement with Chile. Since the late 90s Colombia has signed 14 integration agreements, those with the U.S. and the EU the most important. Agreements with Mercosur and the Pacific Alliance[7] are also relevant in the context of Latin American region. Additionally, there are 13 Investment Agreements in force.

Measures taken at the beginning of the 90's reduced from 43% to 3% the tariff positions subject to QRs (Hommes *et al*., 1994), while the average tariff fell from above 40% in the 1980s to 11.7% in 1992 (Echavarría and Gamboa, 2001). Changes to the tariff structure also occurred on account of integration with Andean countries[8]. The liberalization process resulted in a sharp reduction of tariffs (Figure 1A) and of their importance as a source of revenue (Figure 1B). Until 2009, the average nominal tariff remained between 11% and 12%, largely due to the search for an Andean community common external tariff (CET). In 2010, once autonomy over tariffs was re-gained, tariff sub-headings with levels of zero and 5% rose sharply (Figure 1C). In 2011 the average nominal tariff fell to 8.6% and is now close to 6%. However, efforts to simplify the tariff structure have fallen short of expectations; high dispersion prevails, some sectors remain heavily protected and other forms of protection are prevalent.

[7] With Peru, Chile and Mexico.

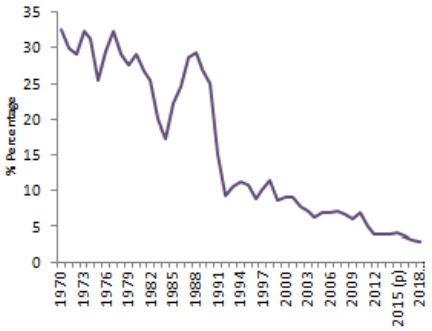
[8] In 1992 the negotiation of a Common External Tariff (CET) among members of the Grupo Andino began and its adoption had an important impact on Colombia's tariff structure (Reina *et al*. 1996). The CET was eventually applied only by Colombia, Ecuador and Venezuela. In 2006 Venezuela ended its rights and obligations as a member of the Andean Community and the effort to maintain a CET was all but abandoned.

Figure 1. Tariff evolution in Colombia

A. Tariff evolution

Year	Average Simple Tariff	Surcharge	Tariff + Surcharge	Max. Tariff	Weighted Tariff	Standard Deviation
1950	40		40	n.d.	n.d.	10
1959	45		45	n.d.	n.d.	28
1964	45.7		47	400	64	46
1965	47		47	400	65	46
1966	46	4	52	400	66	47
1970	47	4	51	450	66	46
1972	47	4	51	350	66	45
1973	48	4	52	350	62	37
1974	31	4	35	350	35	22
1976	28	6	36	200	29	20
1979	26	6	34	150	26	16
1980	26	6	34	150	24	16
1981	26	6	34	150	25	19
1983	34	8	42	198	32	24
1984	42	7	49	200	40	30
1985	31	15	46	200	34	17
1988	27	18	45	200	31	17
1989	27	18	45	200	29	17
1990	25	15	39	100	25	14
1991	17	n.d.	n.d.	75	19	15
1992 - 1994	12	n.d.	n.d.	40	12	9
1995 - 1997	12	n.d.	n.d.	35	12	6

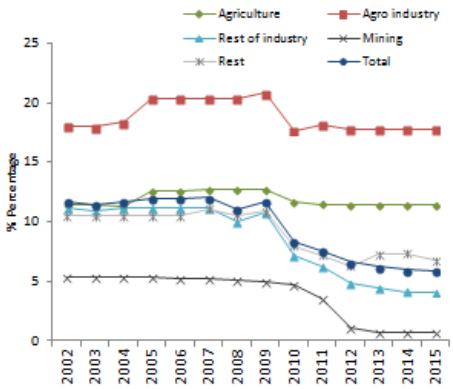
B. Tariff Revenue as a percentage of Total Taxes



C. Number of Sub-headings by Tariff Level

Tariff rate (%)*	2002	2010	2015
0	472	276	3912
3	2	2	2
5	2100	4498	789
10	981	803	1288
15	1644	1547	1317
20	1671	81	90
30	0	3	3
35	19	52	39
40	0	1	1
60	0	9	10
70	0	3	3
80	0	17	17
94	0	3	3
98	0	14	14

D. Average Simple Tariff by Sectors



Source: A) García, et al. (2014); B) and C) Authors' calculations based on DIAN and DNP; D) Perfetti and Botero (2018).

The reduction in tariffs was important in manufacturing (different from the food industry) and in mining, in particular since 2010, although liberalization was not uniform across sectors, with some having higher tariffs than the average in manufacturing (e.g. textile and apparel). Agriculture and agroindustry remain highly protected, with average nominal tariffs of 12% and 18.8% (Figure 1D).[9] "Sensitive" products such as sugar, beef,

[9] It is important to note that the tariff structure provides higher rates to goods with more value added and that agroindustry includes highly protected products of an agricultural nature. For our purposes, sectors included in **agriculture** correspond to those in section 0 (Agriculture, forestry and fishery products) of the UN´s Central Product Classification, version 1 (adapted for Colombia, CPC v.1, a.C). CPC includes in section 0 sugar cane, rice with husk and husked rice. In this paper, activities included in **agroindustry** correspond to those in divisions 15- and 16 (adapted for Colombia, ISIC rev 3, a.C.). ISIC includes in those divisions milling products (where husked rice is considered), sugar manufacture and refining, and cocoa, chocolate and confectionery processing. This division into agriculture and agroindustry calls for the following caveats: i) Husked rice is considered in the series of tariffs for both agriculture and agroindustry, because that processing stage is included in both the CPC and ISIC classifications, used in the correlatives that allow us to estimate tariffs, production and trade; ii) To the extent that refining and milling activities are considered industrial, they are included in agroindustry, so it would seem that agroindustry is more protected than agriculture when tariffs are estimated, but in practice this is a matter of how information systems classify sectors. When we say that sensitive agricultural products are more protected than agroindustry, we refer to the downstream of the

rice, and milk have much more protection on account of a price band system (PBS in what follows) and in some cases because of the application of fixed tariff rates that can reach up to 80%. Considering tariff rates resulting from these mechanisms, the average nominal tariff for 2002-2015 was 12% for agricultural products and 20.3% for agroindustry. When taking into account imports entering with preferences from trade agreements, tariffs are of course lower. Perfetti and Botero (2018) show that during 2002-2015, the average effective tariff on agricultural goods was 4.7% and on agroindustry of 5.2%.[10] It is important to bear in mind that most of these preferences are linked to tariff quotas, so the effective tariff applies to a volume of imports that is not significant compared to production[11]. Outside these quotas, tariffs that result from the PBS or high fixed rates make imports expensive.

It is worth noting that the reduction of tariffs that came about with *Apertura* was soon partially offset by an increase in NTBs across the board. For some analysts this fast and effective counter reform began almost at the same time as the reform itself (García, *et al.*, 2014). Some sectors traditionally shielded from foreign competition – in particular agriculture and agroindustry-- achieved even higher levels of protection with new measures. Other sub-sectors in manufacturing that exhibited lower protection with the decline in tariffs after *Apertura*, obtained new protection through NTBs to the point that it is not evident that current levels of effective protection are lower than in the early nineties.

Table 1 shows that the increase in the number of NTBs was generalized and covered agriculture as well as manufacturing[12]. The highest increase in NTBs between 1991 and 2014 was in capital goods, in particular those for industry. The rise in NTBs was particularly important in 2002 and they remain high. According to García *et al*. (2014), during the Uribe administration (2002-2010) the policy of granting benefits to specific groups deepened when the percentage of sub-headings having NTBs increased from 63% to 78%. The purpose was to protect specific sectors affected by a strong currency and foreign competition. In manufacturing, tariff changes and NTBs benefited products such as textile

agroindustry productive chain (activities such as the preparation of oils and derivatives, the manufacture of cookies, chocolates and sweets, among others), *not covered by the price bands system*.

[10] For products with price bands, the average effective tariff is higher: husked rice (32.1%), pork (13.6%), dairy products (12.1%) and sugar (6.9%).

[11] During 2002-2013 the average import penetration ratio was 7.6% for palm oil, rice 6%, sugar 7.5%, meat of chicken 4.5%, and milk 0.8%, with higher levels for some years, but never exceeding 15%. In contrast, soybeans, soybean oil, barley and corn are primarily supplied with imports.

[12] Of course, the number of NTBs is an imperfect proxy for the protection they provide.

and apparel, footwear, plastic, leather, food products, motor vehicle parts and furniture, even breaching commitments under the WTO. These sectors have been very active in the use of defense mechanisms, especially against China. In fact, in 1999 a *special safeguard or safeguard by reason of disruption* regulation was issued, among other reasons to have a more agile mechanism to confront China. This rule is less strict in terms of causes for application than the general safeguard rule and applies to imports of any origin provided that the requested tariff increase does not exceed the level consolidated by Colombia in the WTO when the investigation involves a member country. Based on a survey, Melendez and Perry (2010) show that the percentage of textile and apparel firms benefiting from protection against foreign competition increased from 20% before 2000 to 45% since.

Table 1. NTB coverage ratio*

	1991	1992	1993	1994	1996	1997	1999	2001	2003	2005	2006	2008	2012	2013	2014	%
Total	**27**	**34**	**46**	**53**	**59**	**62**	**64**	**63**	**78**	**77**	**77**	**76**	**76**	**78**	**78**	**189**
Consumption goods	**19**	**30**	**50**	**61**	**68**	**73**	**75**	**72**	**80**	**81**	**81**	**81**	**82**	**83**	**83**	**337**
Non - durable	19	35	61	71	80	86	88	88	92	92	93	92	92	93	93	389
Durable	17	18	27	37	41	43	44	35	52	53	54	55	58	59	59	247
Raw materials and intermediate goods	**41**	**49**	**63**	**68**	**73**	**76**	**77**	**77**	**85**	**83**	**84**	**81**	**81**	**85**	**85**	**107**
Fuels and lubricants	45	39	40	59	67	67	67	72	100	100	100	96	77	77	77	71
For agriculture	30	70	94	97	99	99	99	100	100	100	100	100	100	100	100	233
For the industry	41	48	62	67	72	75	76	76	84	82	83	80	80	85	84	105
Capital goods	**8**	**10**	**10**	**18**	**21**	**21**	**25**	**21**	**60**	**59**	**60**	**59**	**57**	**58**	**58**	625
Construction materials	20	26	28	41	42	42	42	36	63	62	62	55	48	50	51	155
For agriculture	7	7	5	8	14	15	15	11	48	46	46	47	25	25	25	257
For the industry	4	5	5	9	10	10	16	16	57	56	56	57	58	58	58	1350
Transport equipment	11	14	16	33	51	51	54	35	75	71	75	73	71	71	71	545

Note: Calculated as the share of imports of a certain category of products subject to NTB's.*
Source: García, et.al (2014).

It is therefore clear that despite the liberalization that *Apertura* brought about, some manufacturing sub-sectors are still protected. This protection, combined with other forms of public support, has been the result of the influence of different actors whose effectiveness varies across administrations. According to Meléndez and Perry (2010), the cumulative support through policy instruments, has been very much determined by lobbying and has remain concentrated in the same hands over time, policies rarely being horizontal. It is still the case, however, that agriculture and agroindustry remain the most protected sectors, with negative effects on productive chains and consumers, as we discuss below.

B. An under-performing agricultural sector

During the last two decades, agriculture has underperformed the rest of the economy (Figure 2A). This mediocre growth is in contrast to what happened in most of the region (Figure 2B). Labor productivity in agriculture has been much lower than in other sectors

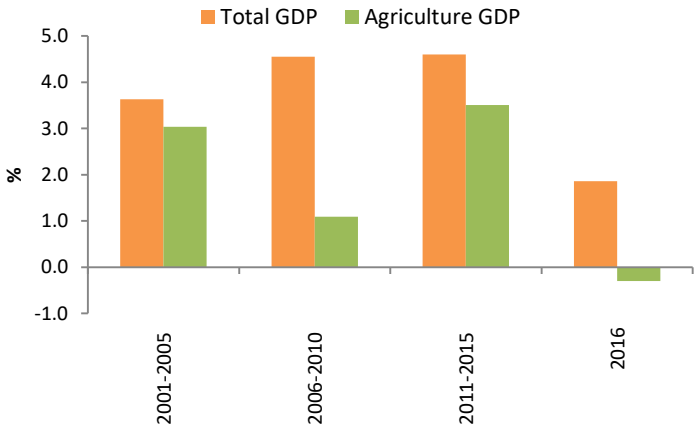
(Figure 2C) and although it has increased in time, the gap remains. Labor productivity with respect to the U.S. is low in general, dismal in agriculture (Figure 2D)[13]. Since 1990 the volume of agricultural exports has increased 39%, a poor performance in comparison to Peru (298%), Brazil (236%), Mexico (215%), Chile (119%) and Argentina (114%) (Figure 2E). Colombia´s export basket remains concentrated in hydrocarbons, coal, plantain and flowers. Even excluding hydrocarbons and mining, the export basket is one of the most concentrated in the region (Figure 2F). A telling indicator of lack of agricultural dynamism is Colombia´s inability to develop new export products—i.e. different from those having a very long tradition. A regional comparison appears in Table 2. A very interesting case is that of Peru, which did not export any asparagus in 1970 but by 2010 accounted for 40% of world exports. Similar stories can be found around the region, the notable exception being Colombia, whose last "discovery", fresh cut-flowers, dates some 40 years.[14]

[13] There is significant dispersion across sub-sectors. Productivity (per hectare) is very high in flowers and sugarcane. Yields in rice are low and production is being expanded in areas where yields are particularly low (section III.B). In sugar, yields are among the highest in the world (section III. C).

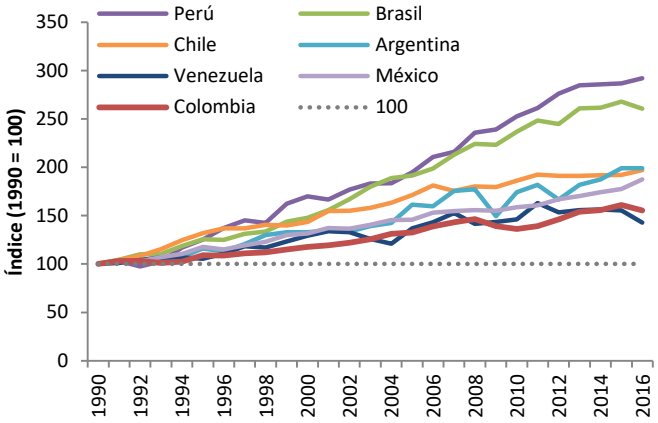
[14] In recent years a more active policy has been undertaken to promote exports of avocado, mango and uchuva (the Colombia Siembra program). The most promising potential, to be developed, is in tradable products such as palm oil, rubber, cocoa and soybeans in the extensive Altillanura, in the south east region.

Figure 2. Colombia´s Agriculture in the Regional Context

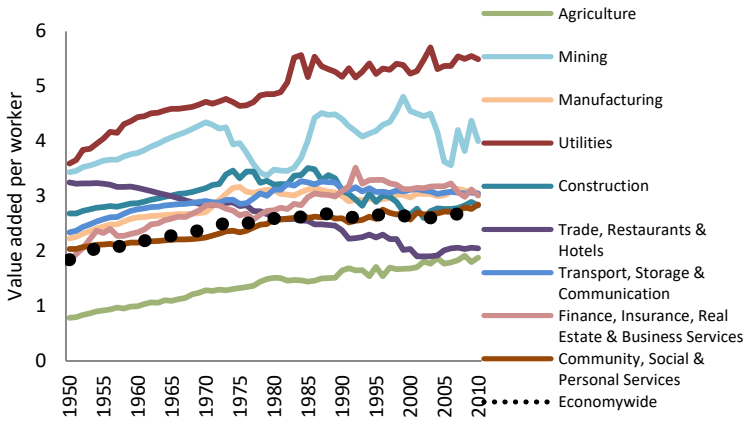
A. Average Total and Agricultural GDP Growth (% change)



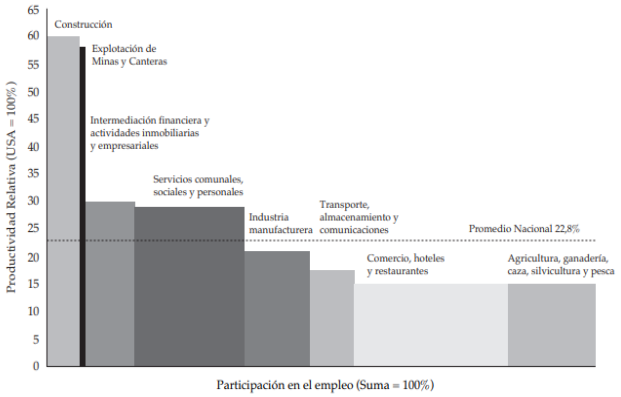
B. Index of agricultural production (1990 = 100)



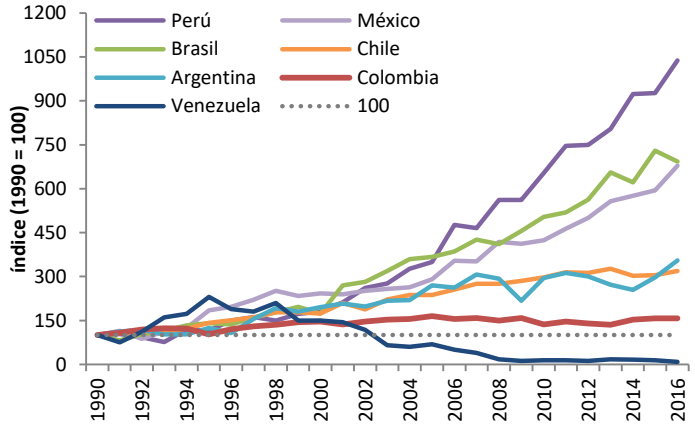
C. Colombia: Labor Productivity



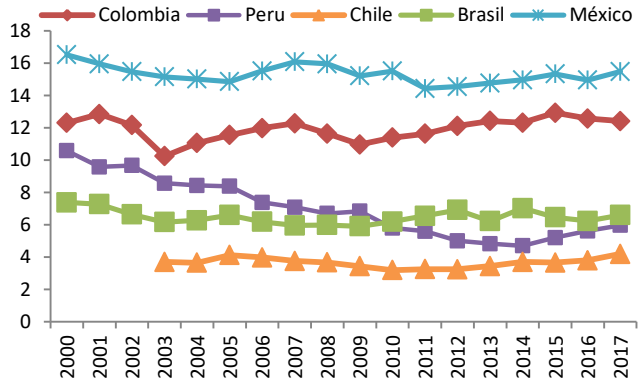
D. Labor productivity relative to the U.S. and sectoral employment (2015)



E. Index of agricultural export volumes (1990=100)



F. Concentration of non-oil and mining exports (Herfindahl Index)



Source: A. Dane. B. Perfetti & Botero (2018); C. GGDC 10 Sector Database ; D. Gómez & Higuera (2018); E. Perfetti & Botero (2018); F. Authors calculations.

Table 2. Evolution of agricultural "discoveries" (% of world exports)

Product	1960	1970	2010	2016
Peru				
Avocados	-	1.5	7.2	10.1
Mangos	0.0	0.0	7.2	9.4
Asparagus	0.0	0.0	39.6	32.5
Chile				
Apples	0.4	0.9	8.6	7.4
3Grapes	1.1	1.8	19.8	14.4
Avocados	0.0	0.0	13.0	7.6
Berries	0.0	0.0	56.3	54.7
Kiwis	0.0	0.0	13.6	10.9
Mexico				
Avocados	0.0	0.0	39.3	48.1
Asparagus	3.5	13.0	26.7	37.2
Mangos	3.9	11.4	20.3	22.2
Lemons and limes	0.3	0.1	18.5	21.4
Brazil				
Mangos	0.0	0.1	9.2	9.2
Refined sugar	0.0	0.0	19.20	19.80
Corn	0.0	5.0	14.8	11.4
Soybeans	1.8	2.3	38.2	32.5
Argentina				
Peanuts	0.0	0.0	17.3	15.1
Lemos and limes	0.0	0.0	10.8	8.9
Soybeans	0.0	0.0	14.0	6.6
Costa Rica				
Pinapples	0.0	0.0	57.5	54.9
Colombia				
Flowers	0.0	10.4*	16.4	16.8

*Source: Authors' calculations based on FAO. Note: * 1980.*

C. Protection in agriculture

Trade policy for most commercial agriculture products has shown an important degree of inertia, not significantly changed by the *Apertura* process. Political reasons and the existence of important producers that consolidated their crops as suppliers to industry during the import substitution strategy phase, help explain this inertia. The 1993

Agricultural Law reflects a mid-point between dismantling *Apertura* in agriculture and maintaining it with the adoption of several provisions to address private sector requests (Jaramillo, 2002). In the interviews conducted for this study it became evident that, for different reasons, there is the widespread view that there is a "historical debt" with the rural sector –the most affected by civil unrest, by a very deficient transportation infrastructure and by distortionary trade practices in other countries. From that perspective, trade protection is an "easy way" to pay for that "historical debt" –i.e. raising tariffs and NTBs is more expeditious and less of a fiscal burden than providing for public goods.

A share of the agricultural sector has remained protected either through tariffs or with special treatment in trade agreements –in particular with tariff-rate quotas (TRQs, Appendix 1) and safeguards (Appendix 2).[15] Since the early nineties, a group of "sensitive" agricultural products has been subject to "special treatment"; the main policy instrument a PBS introduced in 1992, harmonized with Andean countries. The system, which delivers a variable tariff, initially included 8 products but was subsequently expanded to 13 and to close to 150 tariff derivative or substitute products at any given time.[16] Although the main purpose of the PBS was to stabilize domestic prices, its design generates a protectionist bias.[17] Despite criticism from analysts and from agroindustry, the system is still in force for some products while for others it has been replaced with ceilings or fixed tariffs, in both cases with higher tariffs than those for the rest of agriculture (Oviedo, *et al.*, 2018). The 1990s trade reform was complemented with price stabilization funds meant to promote exports and with crop absorption agreements and minimum guarantee prices for some products deemed to be sensitive (Appendix 3).[18] The protectionist bias in favor of agriculture becomes more evident with the growing use of NTBs (Appendix 4). The number of NTBs, mainly of a regulatory nature, has increased significantly. In agriculture

[15] Safeguards for products deemed to be sensitive have been included in several FTAs by means of the Special Agricultural Safeguard (SEA), defined as urgent measures in response to rapid increases in imports that affect or threaten to affect domestic production (OMC, s.f.). A tariff surcharge can be temporarily imposed if imports exceed a pre-determined level, or imports might be outright restricted. During 1999-2013 safeguards were applied 5 times, mainly in response to strikes by farmers (OECD, 2015).

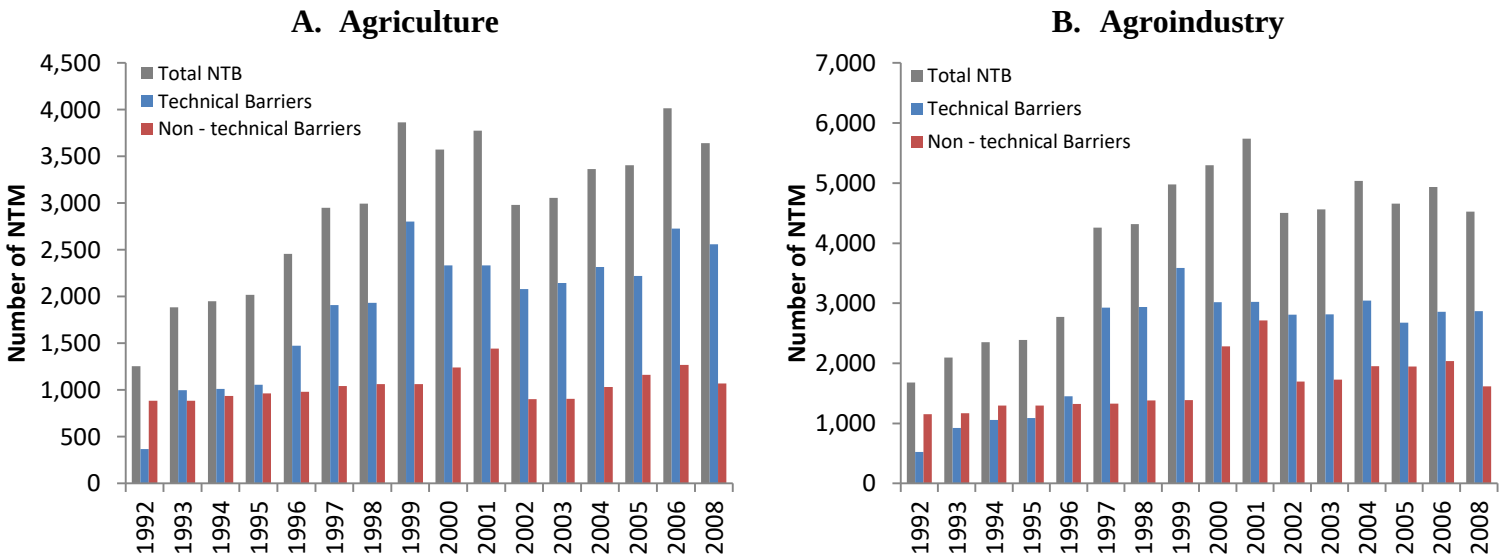
[16] The main products covered by the PBS were meats (pork and chicken), vegetable oils, wheat, dairy products, corn, rice, barley, soy and sugar, as well as their derivatives and substitutes.

[17] Several analyses have shown that protection afforded by this mechanism exceeded the distortions caused by subsidies (Guterman, 2008; and Perfetti and Botero, 2018).

[18] Stabilization funds for meat, milk & dairy products, cotton, cocoa, sugar and palm have been created. In 2003 crop absorption agreements were replaced by the Mechanism for the Administration of Agricultural Import Quotas (MAC).

they went from 1.255 in 1992 to more than 4000 in 2006, and this trend has persisted over time (Figure 3).[19] According to Perfetti and Botero (2018), this trend has not abated and the average number of NTBs by tariff sub-heading went from 12.6 in 2012 to 13.5 in 2015 in agroindustry and from 9.5 to 10.3 in agriculture. As will be discussed later, many of our interviewees mentioned that NTBs can be even more restrictive to trade than the PBS.

Figure 3. NTBs across different sectors



Source: Perfetti & Botero (2018).

Support to agriculture has increased continuously, reaching 2% of GDP in 2013, Colombia one of the countries providing more assistance (Figure 4A). A large part of aid is in the form of distorting market price support (MPS)[20] and border measures, the provision of public goods lagging behind (Figure 4B).[21] The OECD shows that MPS are mainly captured by large producers and are a regressive tax on households. The effectiveness of

[19] Technical measures affecting agricultural imports abound. In 2015 no less than 99.8% of tariff items had at least one sanitary/ phytosanitary measure. Likewise, technical hurdles affected 92.4% of agricultural tariff items, in particular via labeling and bottling. No less than 97.5% of agricultural tariff items lacked automatic import licenses and in agroindustry things are not very different (Perfetti and Botero, 2018).

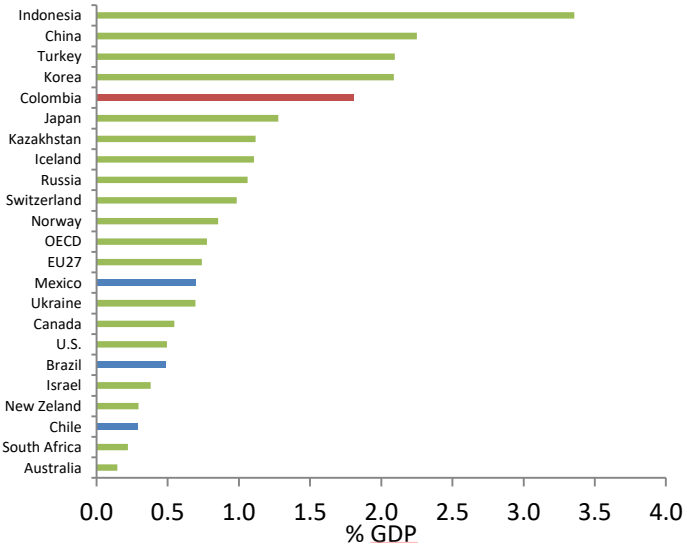
[20] In accordance with the OECD definition, MPS refers to transfers from consumers and taxpayers to agricultural producers from policy measures that create a gap between domestic market prices and border prices of a specific agricultural commodity, measured at the farm gate level.

[21] Junguito *et al.* (2014) estimate that 90% of public funds going to agriculture are in the form of direct subsidies to producers, only 10% provided as "public goods". In Brazil 70% of support is via public goods.

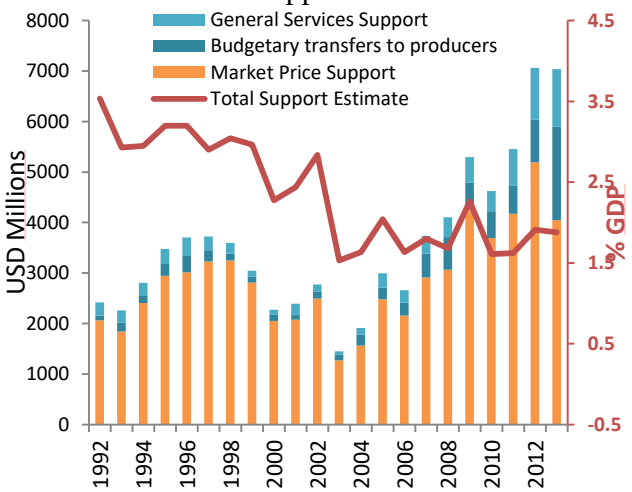
these schemes is also questioned from the point of view of agricultural development and the construction of value chains (Reina *et al.*, 2011; Junguito *et al.*, 2014).[22]

Figure 4. Total Support Estimate (TSE) for Agriculture[23]

A. Total Support Estimate (2011 – 2013)



B. Colombia: Level and Composition of Total Support



Source: OECD (2015).

Total support to agriculture in OECD countries as measured by the TSE has declined from 1.3% of GDP in 1995-1997 to 0.7% in 2015-2017 (OECD, 2018). In Colombia transfers from consumers and taxpayers to agricultural producers are particularly high in refined sugar, rice, milk and poultry, mainly because of their MPS levels. These products also exhibit the highest Single Commodity Transfers indicators (Table 3)[24].

[22] The 2015 government-led Misión para la Transformación del Campo analyzed reforms to the provision of public goods. Surprisingly, a revision of trade policy was not considered within the initiative.

[23] TSE is the value of all gross transfers from taxpayers and consumers to producers, arising from policies supporting agriculture. It includes MPS, direct budgetary transfers and general services support.

[24] Oviedo *et al.* (2018) provide a similar picture. When considering the tariff stemming from the PBS, the 2002–2015 average tariff for rice is much higher than the nominal average tariff for agriculture. Likewise, tariffs for refined sugar (22.8%) and dairy products (38.8%) are higher than the nominal average tariff for agroindustry. When analyzing NTBs, the story is similar.

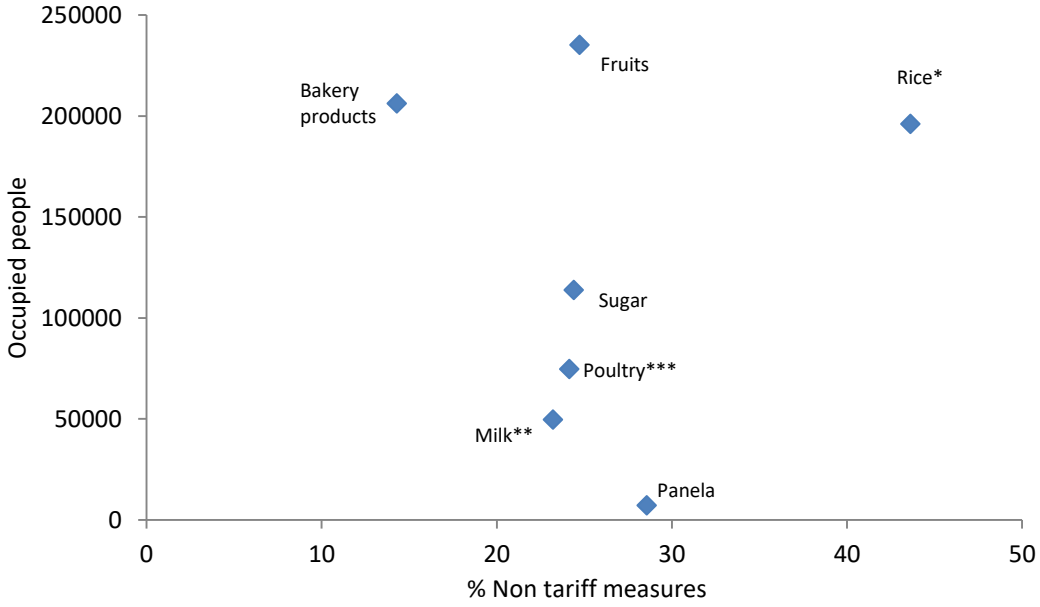
Table 3. Single Commodity Transfers (as % of Gross Receipts)

	1991 - 1995	1996 - 2000	2001 - 2005	2006 - 2010	2011 - 2015	Average
Refined Sugar	33	52	49	30	25	38
Maize	41	39	36	34	31	36
Milk	48	52	19	19	24	32
Poultry	36	29	11	26	30	26
Rice	7	33	22	28	32	24
Pork	-13	15	10	41	31	17
Beef	8	16	23	9	3	12
Oil Palm	7	11	25	10	3	11
Eggs	1	7	-1	13	13	7
Coffee	7	1	9	6	8	6
Plantain	0	0	0	5	4	2
Banana	0	0	0	0	0	0
Flowers	0	0	0	0	0	0

Note: Total value of subsidies and other transfers from consumers/taxpayers to agricultural producers. Estimates include price stabilization funds, commercialization funds, productive alliances and incentives.
Source: OECD (2015) & Perffeti & Botero (2018).

Many highly protected products are important generators of employment. While this feature probably strengthens the political influence of these sub-sectors, the relationship between employment and NTB prevalence is not evident (Figure 5). On the other hand, rice, sugar, poultry and milk weigh heavily in the consumption basket, particularly for low-income households. Figure 6A and Figure **6**B, albeit comprising only a handful of items, suggests that the products most protected with price bands, NTBs and direct transfers are those that weight more heavily in the consumption basket. This is indicative of producers exercising more influence than consumers regarding trade policy. These products have a low price-elasticity of demand. Although the relationship between protection and price-elasticity is not clear-cut (Figure 6C and Figure 6D), it can be argued that in the cases of rice and sugar this low elasticity provides comfort to producers that their claims for protection are not self-defeating, higher prices leading to lower revenue.

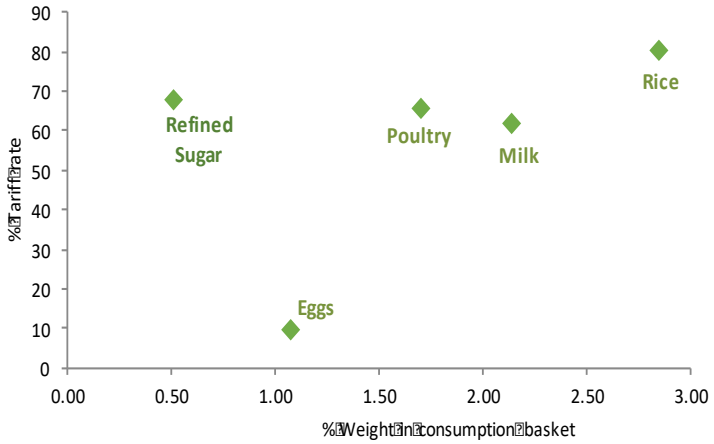
Figure 5. NTBs and Employment



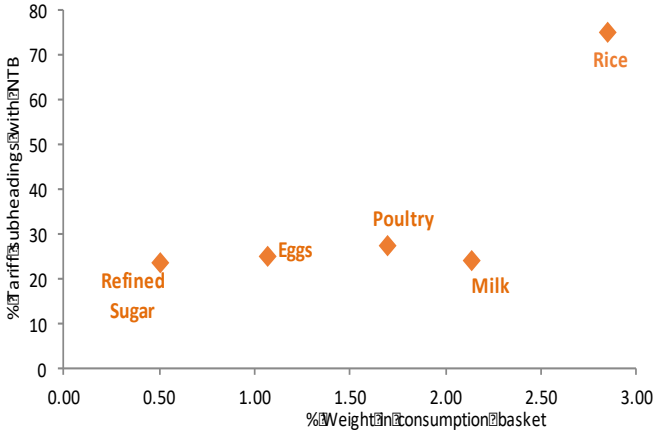
Source: Authors' calculations based on GEIH – DANE. Note: We have included products corresponding to divisions 01, 15 and 16 of CIIU Rev.3 a.C. which incorporates agriculture and agroindustry.
Note: * Includes other cereals: in 2016 rice accounted for 78% of the total value of cereal production. **Includes other milk derivatives. *** Includes other meat derivatives.

Figure 6. Tariffs & NTBs and their relationship to demand

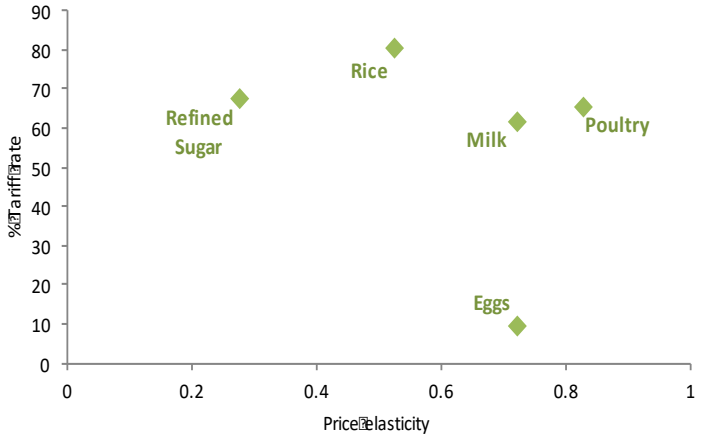
A. PBS Tariff & Importance in Consumption Basket



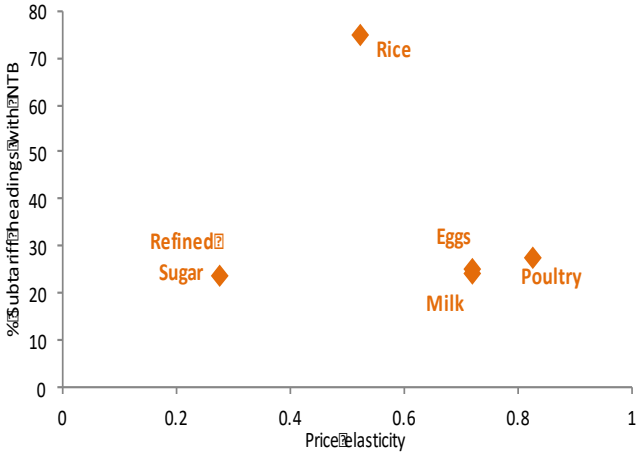
B. NTBs & Importance in Consumption Basket



C. PBS & Price-elasticity of Demand



D. NTBs & Price-elasticity of Demand



Source: Authors' calculations based on DANE, DNP and Perfetti and Botero (2018).
Note: In panel A, protection refers to the nominal tariff resulting from the application of price bands. In panel B it refers to the percentage of tariff items having at least 1 NTB.

In sum, Colombia provides significant support to agriculture, in particular to products that heavily weight in the consumption basket. The weight of protected products is particularly high in poorest households (close to 25%) and much higher than in several other countries that also provide significant price support to agriculture (Table 4).

Table 4. Weight in the Food Consumption Basket (%)

	Rice	Sugar	Poultry	Milk	Oils and fats	Total weight	Medical care*	Culture and Recreation*
Colombia (total)	6.2	1.4	4.7	5.9	3.4	21.5	0.5	1.8
Colombia (poorest households)	8.2	1.5	4.9	6.2	3.6	24.4	0.3	1.1
Mexico	0.7	1.2	6.1	6.1	1.4	15.5	2.8	2.9
United States	0.9	2.0	2.5	1.6	1.6	8.5	8.5	5.7
Japan	2.0	1.1	1.4	1.5	0.5	6.5	0.4	1.0
Switzerland	0.4	0.3	3.4	4.2	2.3	10.6	15.1	8.9
Turkey	1.5	1.5	3.6	2.7	2.2	11.5	2.6	3.4

Note: Based on each country's CPI
Source: Authors' calculations.

Rice and sugar are particularly interesting case studies in the context of this project because their dynamics involve a multiplicity of actors beyond producers and consumers, the milling industry in the case of rice, the food & beverage industry in the case of sugar. While similarities are interesting, important differences are also worth highlighting. For instance, while sugar production takes place in one region and producers are mostly large land-owners, rice is produced in several regions, generally by small farmers who face a concentrated milling industry. As mentioned in the introduction, in future research we wish to expand this project by analyzing the cases of milk, poultry and palm oil, products that are also heavily protected and involve relevant actors in the production chain and in the policymaking process.

III. The political economy of protection of some "sensitive products"

We identify the actors involved in the trade policymaking process in agriculture and then move into the specific cases of rice and sugar. For both sectors we analyze, from a political economy perspective, the determinants of the trade policy in place. In the last section we explain how a more liberalized outcome with respect to rice and sugar as well as other sensitive products was reached in the TPA. The analysis is based on secondary information and on the main issues that emerged from several semi-structured interviews undertaken.[25]

[25] In Appendix 9 we list all the persons interviewed for this project.

A. Main Institutions and Actors

1. Government and the institutional framework

As part of the liberalization process undertaken in 1991, a comprehensive law established that the "foreign trade sector" would comprise a group of public entities and the private sector and created several coordination instances. In the public sector, the Consejo Superior de Comercio Exterior (CSCE)[26] is the advisory body in charge of defining policy; the MoFT implements policies defined by the CSCE and leads trade negotiations. The CSCE had a preponderant role in the early 90s but has faded over time. Treaties must be presented to Congress jointly with the Ministry of Foreign Relations. Ministries such as Agriculture, Health and the Environment are involved in specific areas.

In the context of the case studies in this paper, a prominent role has been played by the MoA. In sharp contrast to the technical nature of other government agencies, --i.e. the MoF, the National Planning Department, the Central Bank and the MoFT-- the prevalence of career politicians in the higher echelons of the MoA has been notorious. When the ministry has not been headed by a career politician, it has generally been led by a former president of one of the sectors´ business association, creating conditions for capture by vested interests. This situation worsened in the last decade due to the increase of the MoA´s budget, partly to execute compensation mechanisms derived from the TPA. The MoA administers a particularly large budget, employs a huge number of people and has ample regional coverage. Table 5 provides a comparison with the (more technical) MoFT and with the highly politicized Comptroller Office. Interviews conducted with former officials of the MoFT and academics suggest that the MoA, being highly politicized and generally lacking technical capacity, is easily captured by the private sector. Its views on trade policy have almost always been geared towards protecting importable commercial products rather than opening markets as part of a more holistic development strategy. It appears to be the case that the policy changes that occurred during the first half of the nineties, if anything, empowered the protectionist wing within the agricultural sector.

[26] Composed by the President, the Ministers of Economic Development, Foreign Trade, Foreign Relations, Finance, Agriculture, Mines & Energy, director of the Planning Department, Central Bank governor, president of the Banco de Comercio Exterior, Director of Customs, and the Advisors of the CSCE.

Table 5. The MoA controls a large budget and a huge bureaucracy

Institution	Personnel (2015)	Budget (millions 2017)*	Regional coverage
Ministry of Agriculture**	*1010*	*$ 1,453,703*	Bogotá
Instituto Colombiano Agropecuario**	3416	$ 282,130	32 departments
Unidad de Restitución de Tierras	479	$ 216,160	23 municipalities
Autoridad Nacional de Acuicultura y Pesca	128	$ 40,784	7 municipalities
Agencia Desarrollo Rural	113	$ 395,701	13 municipalities
Agencia Nacional de Tierras	230	$ 291,858	8 municipalities
Unidad de Planificación Rural Agropecuaria	67	$ 25,088	Bogotá
Total under purview of MoA	**5443**	**$ 2,705,424**	
Ministry of Foreign Trade	*303*	*$ 624,647*	Bogotá
SIC	355	$ 158,720	19 municipalities
Superintendencia de Sociedades	485	$ 127,220	7 municipalities
Instituto Nacional de Metrología	100	$ 18,619	Capital District
Junta Central de Contadores		$ 20,354	10 municipalities
Total under purview of MoFT	**1243**	**$ 949,561**	
Contraloria General de la Nación**	**10904**	**$ 785,051**	**32 departments and 30 municipalities**

Source: Authors' construction.

**Appropriations; ** Includes contractors ("nómina paralela")*

The 1991 reform created a coordinating instance, the *Comisión Mixta de Comercio Exterior*, made up of the CSCE and private sector representatives. In 1999 it became the *Comisión Mixta de Comercio Exterior y Competitividad*, with the participation of the ministries of Labor, Health & Social Security and representatives of labor unions and academia. According to Javier Díaz, President of Analdex, the Comisión Mixta is rarely convened and institutional coordination is weak. In 2006, during the TPA negotiations, the government created the *Sistema Nacional de Competitividad* with a similar purpose to that of the Comisión Mixta, but with a greater scope in its membership.

2. Business

Private business can influence economic policy in general and trade policy in particular from four different levels: (a) large firms acting individually; (b) business associations at the sector level; (c) umbrella associations of the latter; and (d) business consortiums having interests in companies operating in different sectors. We begin by making reference to the *Consejo Gremial Nacional* (CGN), an umbrella organization informally established in 1991 and formalized in 1993.[27] Carrying significant economic weight makes the CGN influential

[27] Appendix 5 shows the composition of the CGN. For details on its history see Junguito *et al.* (2015).

on many issues –including international relations and in dealing with guerrilla´s and organized crime— in which the private sector is able to "speak with one voice". Its influence on matters in which a consensus view is unfeasible (i.e. trade policy), is less clear.

Diverse interests with regard to economic policy are not only prevalent within the CGN; there are also distinct interests within many sectoral business associations. Three revealing cases are ANDI, ANALDEX and SAC[28]. These organizations, particularly the first two, are comprised of firms and sub-sectors that do not necessarily share a common view with regard to trade policy. SAC is extremely active in lobbying for protection and some of its sub-sectoral associations such as Asocaña, Fedegan, Fenavi and Fedearroz have been successful in maintaining protectionist measures.[29] On the other hand, given that in many sub-sectors that do export the domestic market remains its most relevant, even exporting sub-sectors might have a rather protectionist view with regard to trade policy.

Another dimension of how businesses are organized is as entrepreneurial groups –the so-called *cacaos*, or "big-shots", consortium of firms in different sectors with common ownership. In their discussion of compensation mechanisms used by President Gaviria to facilitate the passing of his 1990-1991 reform program, Edwards and Steiner (2008) argue that cacaos negatively affected by certain reforms –i.e. trade liberalization compromising profitability of import-competing businesses— benefited from the privatization of the mobile phone business.[30] Today, large business organizations exert significant control over the media (Table 6). As we discuss later, recently one of these groups played a critical role in derailing the government´s attempt to tax sugar-sweetened beverages.

[28] ANDI is Asociación Nacional de Empresarios (previously of Industriales); SAC is Sociedad de Agricultores de Colombia; ANALDEX is Asociación Nacional de Exportadores.

[29] Asocaña is Asociación Agroindustrial de Caña; Fedegan is Federación Colombiana de Ganaderos; Fenavi is Federación Nacional de Avicultores de Colombia; Fedearroz is Federación Nacional de Arroceros. In section III.B and III.C we will refer in some detail to Fedearroz and Asocaña, the most important business associations for the products we have selected as case studies.

[30] Rettberg (2003) provides evidence that although in 1996 the CGN was of the view that President Samper (1994-1998) should resign from office once it became evident he had received campaign contributions from a drug cartel, he was able to remain in power thanks to support from the *cacaos*.

Table 6. Three "cacaos" (big shots) play an active role in the media

Conglomerate	Sectors	Media
Luis Carlos Sarmiento Angulo	Finance Agro industry: rice seeds, cattle, rubber, Infrastructure Hotel industry Mining Energy and gas	El Tiempo Portafolio ADN City TV
Grupo Santodomingo	Manufacturing Finance Transportation industry Agro industry: cereals and oilseeds Commerce	El Espectador Caracol TV Blu Radio
Organización Ardila Lulle	Agro industry: refined sugar, biofuels, agro Beverage industry Automotive industry Sports	RCN Televisión RCN Radio NTN 24 Diario La República Mundo FOX

Source: Author's research.

Finally, the *Consejo Privado de Competitividad*, a think-tank sponsored by private business, interacts with government, private sector, academia and other organizations that promote productivity & competitiveness. It was created in order to articulate the positions of different actors and to advocate for cross-cutting interests rather than particular ones. It has always supported a liberalized and non-distortive trade regime. However, its success in coordinating positions along the productive chains has been rather limited.

3. Labor unions and *Dignidades Agropecuarias*

Labor union membership has been low and declining, mostly prevalent in utilities (Appendix 8). Labor organizations have been particularly active in two fronts, wage bargaining, notably regarding the minimum wage, and labor market reforms. On trade matters, while labor opposed the 1990-1991 liberalization effort, they were not vocal actors (Edwards and Steiner, 2008). However, the TPA negotiations drove them to organize two national strikes. Their actions, jointly with U.S. labor unions, ended in a side agreement on the protection of labor rights but did not affect the liberalization outcome.

While unionization in agriculture is low (less than 3% in 2016), the politicization of agriculture has become significant. In August 2010, some 4000 rice producers convened as a "protest for the dignity of rice producers ", demanding profitable prices, limits to imports and contraband, and resources for R&D. Soon after, and with the intention of establishing

the *Movimiento por la Dignidad Cafetera*, in 2012 some 700 coffee growers gathered in Riosucio, Caldas. This was to be followed in 2013, when thousands of farmers took part in one of the largest protests in recent history, the National Agriculture Strike. It was called to voice rejection to the TPA; lack of government support; poor working conditions; low international prices and the strengthening of the peso[31]. In the context of the strike, the *Dignidades* concept was replicated in other sectors. As a result, the National Agriculture Dignity Movement was established.[32] If anything, the emergence and strengthening of the *Dignidades* movement underscores the fact that, for many producers, traditional trade unions in the agricultural sector had become ineffective and obsolete. Protests and regional strikes from agricultural producers have now become quite common. Of note is the fact that in 2017 the *Dignidad Arrocera* demanded from the government the re-negotiation of the TPA, fair prices, incentives for storage, and attention to the high costs of production.

4. Congress

Congress consists of two chambers, the Senate and the House of Representatives. Senators are elected in a nation-wide district, Representatives in regional ones (under proportional representation). The over-representation of departments were agriculture and cattle-raising is important is evident in the Senate. In the 2014 elections, Cordoba and Sucre, where cattle-raising is dominant, provided 5 and 6.6 senators per 1 million inhabitants, respectively. This is in sharp contrast with Bogotá. While 20% of the population lives in the capital city, in the 2014-2018 Congress only 8 senators (out of 102) were born there. Interestingly, departments with an agricultural vocation have higher participation in congressional than in presidential elections. For example, in the 2014 elections, 64.4% of voters in Sucre participated in the elections for Congress, only 38.8% in the Presidential context (which happened a few weeks afterward). In Córdoba the relevant numbers are

[31] Active participation of Dignidad Cafetera in the strike resulted in the creation of the Coffee Income Protection Program (PIC), a $1.1 billion subsidy to farmers (equivalent to 76% of all resources allocated to the AIS program described below). Although Dignidad Cafetera allegedly based its strength in granting a voice to small producers ill-represented by the traditional National Coffee Federation, PIC´s distribution was grotesquely regressive –the 10% largest producers received 62% of the overall subsidy, the smallest 20% nothing at all (Steiner *et al*, 2015). In 2014, after conversations with the MoA, the Dignidad Arrocera movement managed the establishment of a mandatory price range for millers, differentiated by region.

[32] Comprised of Dignidad Arrocera (rice), Dignidad Cacaotera (cocoa), Dignidad Papera (potatos), Dinigdad Cafetera (coffee), Acopaneleros (brown sugar), the Cordoba and Mojana's Salvation Movement and the Movimiento por la Defensa de la Ganaderia (cattle raising).

58.3% and 36.1%. In sharp contrast, Bogotá voters participated more actively in the presidential election (48.3%) than in the one for the Senate (35.5%).

Congress has the authority to enact laws related to the regulation of foreign trade, the modification of tariffs and rates, and the customs regime. Through so-called "Leyes Marco" (*Framework Laws*), it defines the objectives and criteria to which the government must abide when drawing up bylaws. With regard to an FTA, it exercises political control at two moments. During the negotiation phase it may require ministers and the negotiating team to report on the progress of negotiations. When the treaty has been signed, it is submitted to its approval, not having the authority to modify it. The Constitutional Court, in turn, has to opine that no commitments agreed to in a treaty are contrary to the constitutional order. According to some interviews, discussions in Congress regarding the substance of FTAs are generally weak. However, as discussed later, the role of Congress in trade agreements intensified with the TPA, where specific participation channels were put in place.

The relationship between the private sector and Congress is quite opaque. In spite of several attempts, Congress has yet to regulate lobbying activities. There is no registry of lobbying firms and no well-defined rules regarding issues such as conflict of interest, although some transparency has been achieved in the critical topic of private sector financing of political activities.

B. The political economy of rice protection

Rice has been among the products with the highest levels of protection through the PBS and on account of minimum guarantee prices and supports for storage and commercialization[33]. Rice constitutes an interesting political economy case study in which the influence of producers arises from the sector´s structure of thousands of medium and small producers throughout several regions who reap most of the price differential generated by the tariff on paddy rice (at this moment MFN rate of 80%). However, it is worth noting that protection to growers explains only part of the difference between the world price and the price paid by Colombian consumers. Indeed, the oligopolistic nature of the milling industry, coupled with the very high tariff on white rice (also a MFN rate of 80%), allow millers to fully transfer to retailers the cost of the protection afforded to rice

[33] The storage incentive seeks to encourage mills to buy paddy rice at harvest time, dry it and store it.

growers. Furthermore, consumers pay final prices that have to account not only for the protection given to growers and to the costs associated with an oligopolistic and heavily protected milling industry, but also for the costs arising from an inefficient and heavily populated domestic commercialization chain. Given the nature of this project, we will not delve into the domestic commercialization stage, instead focusing our attention on protection to producers that face a heavily concentrated and protected milling industry.

1. Sector characterization

In 2017 China and India lead paddy rice production with 210 million tons and 166 million tons respectively, while Colombia increased its production from an average of 2 million tons between 2013 and 2015 to 2.7 million tons in 2017. In the Western Hemisphere the main paddy producing countries are the U.S. (9.2 million tons), Brazil (12 million tons) and Peru (3 million tons).[34] According to data from the MoA, in 2015 rice accounted for 5% of total agricultural production and 12% of the harvested area, the fourth product in importance after coffee, palm oil and corn. Data from the 2016 census undertaken by Fedearroz and other sources illustrate the main characteristics of the sector:

- Most of the rice cultivated is mechanized (570.802 Ha in 2016), with rain-fed rice being the most widespread form of cultivation while manual rain-fed rice has a marginal participation (15.030 Ha in 2013).
- There are more than 16.000 mechanized rice producers. In 2013 there were 16.971 manual dry rice producing units, with a production level of around 27.000 tons –i.e. bread-to-catch crops with very low productivity.
- Although there are large-scale crops, small and medium producers predominate, most of whom do not own the land. The average size of a production unit is less than 10 hectares, with some 63% of producers as tenants.
- There is great regional disparity in productivity; importantly, between 2007 and 2016 output expanded in areas of relatively low productivity (Table 7A).[35]

[34] FAO, 2018. Rice Market Monitor. April.

[35] According to Fedearroz, the decline in yield is explained by the increase in sowing in the rain-fed system, which is less productive; by an expansion of the crop to less suitable areas; by a greater proportion of tenant producers which have low investment levels; and a shortage of combined machines.

- Colombia´s average yield for 1990-2014, while higher than the world average, is significantly lower than that of Peru and the U.S. (Table 7B).
- Import penetration has been low, with an average of 7% before 2015 and of 12% for 2015-2017 (Table 7C). It is expected that imports will increase as a result of market access commitments derived from the TPA (see Section D).

Main actors in the rice value-added chain are growers, mills and a heavily populated distribution chain[36]. Rice growers are members of Fedearroz and mills are part of Induarroz, which operates under ANDI´s umbrella[37]. This productive chain is characterized by a high concentration in the milling activity. There were eight important mills in 1996, down to only two today (Molinos Roa and Arroz Diana), with a few of small and medium size[38]. According to data from Superintendencia de Sociedades, in 2017 Molinos Roa accounted for 36% of total sales of the rice milling sector and Arroz Diana for 33%.

[36] In addition to traditional retailers --including small stores, supermarket chains and hard discount retailers—some producers and millers might occasionally become involved in wholesale distribution. In addition, in some cases mills sell rice to packaging companies who, in turn sell to the commercialization channels. In other cases, mills pack and sell to the commercialization channels themselves.

[37] 15 companies from the miller sector are associated in Induarroz.

[38] In 2015 Molinos Roa merged with Flor Huila, two large companies belonging to a family group, and the Roa Flor Huila Organization was established.

Table 7. Rice Production, Yields and Imports

A. Yields by Region

Region	Weight in production 2007	Yield 2007 (ton / ha)	Weight in production 2016	Yield 2016 (ton / ha)
Huila	9%	6,9	9%	7,4
Tolima	33%	7,8	23%	7,2
Norte de Santander	6%	6,3	6%	5,6
Casanare	14%	5,6	26%	5,6
Meta	16%	5,4	12%	5,2
Others	70%	4,2	61%	3,4
Colombia*	**100%**	**6,2**	**100%**	**5,6**

B. Yield Evolution by Country

	Rice	
	Average Yield	Importance in world production
Country	1990 - 2014	1990 - 2014
China	62.7	20.3
United States	72.6	14.2
India	30.6	11.7
Brasil	33.9	3.2
Peru	64.9	0.2
Colombia	44.8	0.2
World average	31.7	

C. Paddy Rice Penetration (Tons)

	Production	Imports	Imports /Production
2000 - 2004	2.276.103	126.686	6%
2005- 2009	2.202.021	151.893	7%
2010 - 2014	1.908.810	113.875	6%
2015 - 2017	2.396.465	296.521	12%

Source: A) Agronet – MADR; B) Faostat; C) Fedearroz & Agronet.
Note: Yields are defined as tonns per hectare.

2. The political economy of rice trade policy

Since the launching of *Apertura* in 1991, rice growers have managed to persuade the government to introduce policy measures to protect the domestic market. These measures include the signing of a voluntary agreement with Venezuela in 1992 in order to limit exports (Jaramillo, 2002) and the establishment in 1996 of a regime to control imports along with the creation of a "rice policy committee policy" --composed of government, millers, producers and traders-- to decide on import volumes, among other aspects. Rice was covered by the PBS from 1991 till 2003, when the mechanism was replaced by a fixed tariff of 80%. The average tariff resulting from the PBS was 52.8% between 1998 and 2003. In 2004 the tariff was increased and several phytosanitary NTBs were introduced.

Until 2005 the rice sector was very active in requesting safeguards against Andean countries since rice has a tariff preference of 100% with those countries. For the 1994-2004 period, rice stands out as one of the products with the highest number of investigation applications for dumping and safeguards (Reina and Zuluaga, 2005). Defensive measures imposed at that time were almost exclusively concentrated in the Andean market, since

most rice imports come from Ecuador. In recent years, non-tariff measures and non-compliance by Colombia with the commitments derived from the agreement with Andean countries have been the mechanisms used to restrict imports.[39]

Rice growers are the obvious beneficiaries of the high tariff as this allows them to continue producing despite low productivity. Millers also benefit from their own high tariffs and from the oligopolistic nature of the sector. However, an interesting feature of this sector is that neither farmers nor millers capture most of the revenue stemming from the very high prices paid by consumers (Espinal *et.al*. 2005). This is explained by the fact that, even though millers can transfer to retailers the cost implied by high tariffs to growers, they are also at the mercy of an inefficient commercialization chain. Nonetheless, an interesting episode of millers actually influencing consumer prices triggered an intervention by the competition authority in 2012. More on this later.

If paddy and white rice prices in Colombia are compared with those of important producing countries, it is clear that tariff protection has an impact, particularly after 2006 (Figure 7 A and B). This development roughly coincides with the substitution of the PBS for the 80% fixed tariff. On average, between 2009 and 2018 the differential between international and domestic prices for paddy rice was 76%, while for white rice it was 108% when compared with the U.S. price, and 139% when compared with Thailand (Figure 7D). This comparison shows a differential of greater relative magnitude in white rice, indicative of the relative ability of millers to capture rents (Figure 7C).

The evolution of prices shows that for both paddy and white rice, the differential between the domestic and the international price has been falling, due to the downward trend in prices within Colombia. This result is influenced by the increase in production and more recently by the impact of imports from the U.S.[40] Consumer price data show that the

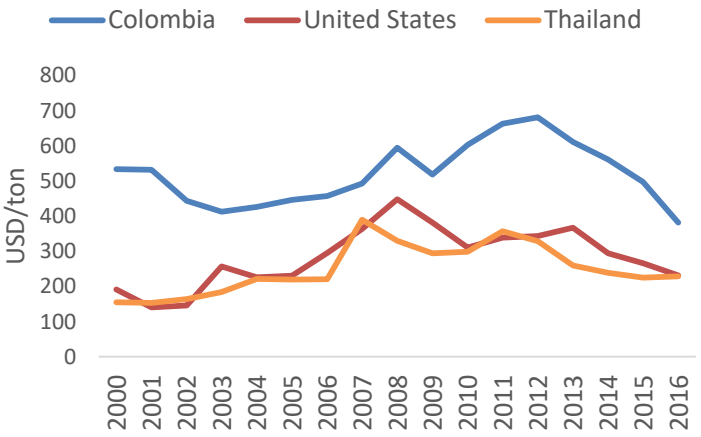
[39] Colombia has been challenged for breaching access commitments in rice signed in trade agreements with the Andean countries and Mercosur. Colombia has limited the issuance of phytosanitary certificates to imports from Ecuador and Peru, in effect blocking access to purchases from these countries. In 2017 the Andean Court of Justice allowed Ecuador and Peru to impose a 10% tariff on Colombian exports as retaliation in the face of the country's non-compliance. Once the Andean countries retaliated in products from other industrial sectors, a very sensitive issue for the MoFT, the practice had to be corrected with a proposal from Colombia consisting of an annual white rice import quota of 87,447 tons in 2018 (approximately 3% of production in 2017), reaching 124,358 tons in 2026, and unlimited after that. Appendix 6 shows the type of NTBs that Colombia applies to rice, according to the methodology developed by UNCTAD.

[40] Although the volume of tariff quotas that come from U.S., and those recently approved for Ecuador and Peru are still not significant compared to national production, our intuition is that when the market is opened, smuggling also increases. The latter can be quite significant, probably having an effect on prices.

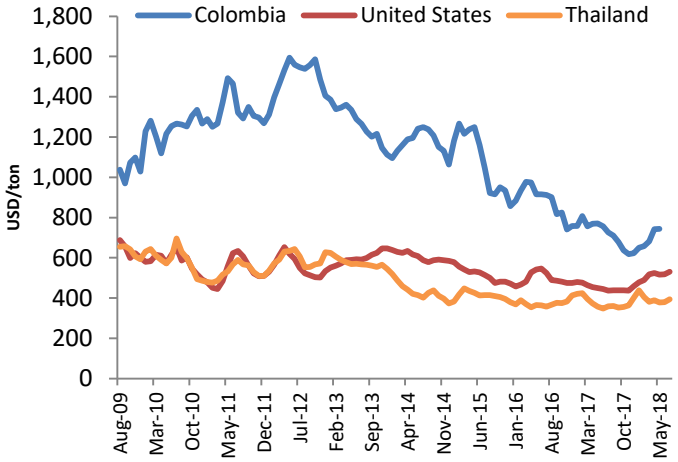
difference between the price of white rice in the mill and the final price can be on average between 35% and 40%, explained by a distribution and commercialization system that involves several intermediaries (Figure 7C). This implies that in the last stage of the chain, before reaching the final consumer, there is a significant margin paid by consumers that is captured by actors different from growers and millers. It is important to note that neither growers nor millers sell directly to the final consumer. This characteristic of large margins between the last stage of the production process and the final consumer is inherent to the commercialization of diverse agricultural goods in Colombia. In fact, in 2014 the Misión para la Transformación del Campo estimated margins of more than 80% in some products (Table 8). It is interesting to note that in some agricultural sectors, protection is often requested so as to compensate for the low participation that producers have in the price paid by consumers. This also applies to the case of rice, were, in addition, it is argued that growers face a highly concentrated milling industry.

Figure 7. Rice Prices (in constant terms)

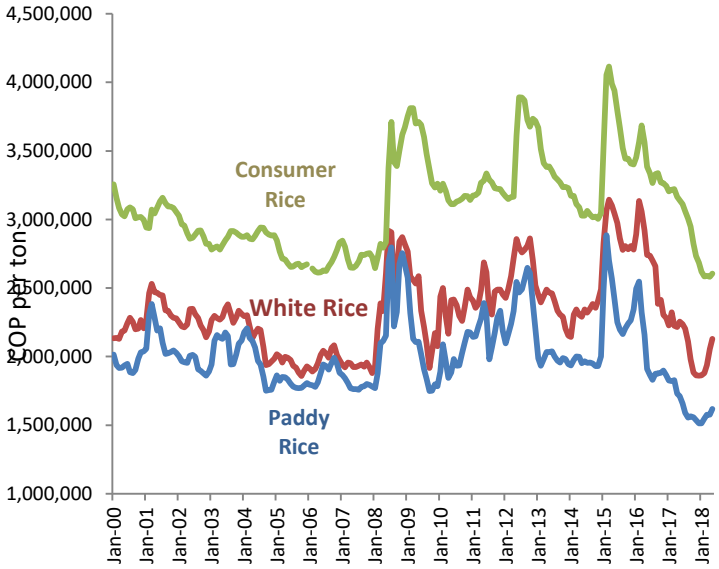
A. Paddy Rice



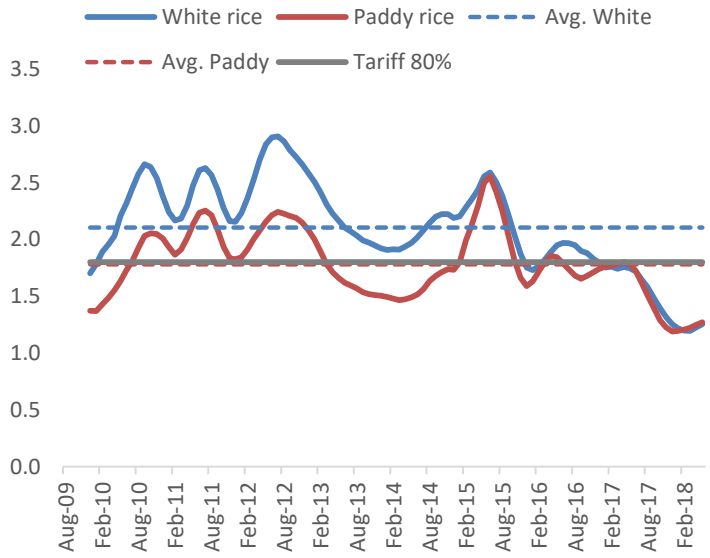
B. White Rice



C. Domestic Prices *



D. Price differentials (Colombia/U.S.)**



Note: All prices are expressed in white rice equivalent.
** Consumer prices are an average of white rice prices in supermarkets, stores and market places*
*** Five month moving average of the original series.*
Source: A) FAO (not adjusted by PPP), B, C, D) Authors' calculations based on Fedearroz – Creed rice

Table 8. Commercialization margins (%)

Product	Margin	Product	Margin
Scallions	81,5	Blackberry	81,5
Onions	67,5	Gulupa	74,0
Tomato	75,9	Passion Fruit	58,3
Lettuce	60,7	Tilapia	46,5
Potato	79,4	Cocoa	22,6
Avocado	62,5	Corn	14,9
Pineapple	40,6	Rubber	59,2
Papaya	56,5	Raw milk	32,3

Source: Misión para la Transformación del Campo. (2014).

The price differential between the mill and the final consumer suggests that there is scope for producers and millers to appropriate an additional portion of this margin, if they are able to reach the final consumer. Fedearroz´s strategy to participate in industrial and commercialization activities points in that direction.

There is a strong controversy within the rice chain, one that does not focus on trade issues or protection. Growers seek tariff protection because their productivity levels are low, in a context in which the milling industry is equally protected and able to fully transfer tariffs to consumers. The milling industry has clearly expressed that its main interest is that the market be allowed to operate without government intervention. The central issue in the contentious relationship between growers and the milling industry is the determination of the mills purchase price. The milling industry considers that the mechanism of minimum guarantee price does not allow them to take advantage of price changes arising from market conditions, while sending signals inducing growers to increase production which does not result from changes in productivity, generating a vicious circle in which the government must eventually intervene with more support, including for storage and commercialization. As shown in figure 7D, since 2015 the price differential between the domestic and the international price has been falling for both paddy rice and white rice, while the difference between the two ratios has been closing. This can be explained by the fact that the very high domestic prices for paddy that prevailed until 2016 eventually delivered a significant domestic over-supply and a decline in domestic prices.

Rice growers often argue they face very adverse conditions owing to the oligopolistic structure of the milling industry, to which at certain junctions they add the impact of smuggling, reinforcing their case for protection. In 2004 the competition authority ascribed

to the MoFT (SIC)[41] investigated several mills for infringement of competition, allegedly by having entered into agreements to fix the price of paddy rice. The investigation culminated in 2005 with the imposition of hefty fines. Later, in 2012 the SIC opened an investigation to Roa and Florhuila mills for influencing the consumer price of white rice and in 2015 imposed a fine for that practice. The entity established that mills under investigation granted discounts to distributors and retailers of white rice and forced them *not* to transfer those discounts to the final consumer, under threat of ending the commercial relationship. Evidently, the milling industry exercises the power derived from its structure, and this is used by growers as an argument to command "support for the small guy".

Beyond this controversy in the productive chain, what stands out is that growers and millers have managed to obtain high levels of trade protection. In this process, growers have been particularly influential, with millers adopting a more passive stance, presumably because the tariff structure for rice has no impact on their effective protection and on account of their ability to transfer any inefficiencies arising from protection to consumers.

Interviews with academics and former government officials evidenced two sources of influence from growers. The first arises from the structure of the sector (small & medium size producers scattered throughout the country), representing the potential threat of paralyzing vast regions through strikes. In fact, since 2010 the *Dignidad Arrocera* movement has opted for *de facto* means to express their views and demands. The threat of blockades to infrastructure and mass marches has been its mechanism of influence. Indeed, since 2014 rice growers have carried out several strikes to express their concern regarding competition from the U.S. and low domestic prices. During the first semester of 2018, faced with the threat of another strike, the government accepted entering into discussions regarding the adoption of a minimum purchase price. The issue has been debated for most of the second semester without reaching a decision despite the fact that most of the harvest comes out in the last months of the year. The strategy of the *Dignidades* has strengthened the influence that producers have generally had on account of the widespread view of a "historical debt" with the rural sector which was mentioned in section II.

[41] Within *Apertura*, the SIC was consolidated as the authority for protection of competition and consumer rights, as well as the body that promotes industrial property and settles controversies on that matter.

Other source of influence of rice growers has to do with the so-called "revolving door" between the producer´s association and government. Several ministers of agriculture had been presidents of production associations, including Fedearroz, and ministers of agriculture are a particularly important channel of influence for large producers. Of course, Congress, given the agricultural vocation of many of its members, has always defended the interests of rice farmers, although most of the interviewees agreed that the role of Congress is secondary to the channels of influence stemming from the relationship of Fedearroz with the MoA and by movements such as *Dignidades*.

The increase in the MFN tariff rate undertaken in 2003 is an interesting episode to illustrate the power of Fedearroz, with the support of the MoA. In December, almost simultaneously with the start of the TPA, Colombia modified the tariff for rice and an annual tariff quota of 75,118 tons was introduced. The measure established a fixed tariff MFN of 80% for imports outside the tariff quota, while the tariff quota would enter with the tariff resulting from the PBS[42]. In that year, the MoA found a window of opportunity to increase protection in the country´s agenda to comply with WTO commitments. Colombia had to modify its crop absorption policy in force since the first half of the nineties, in order to adapt it to WTO regulation. That modification consisted of creating a mechanism called the Mechanism for the Administration of Agricultural Import Quotas (MAC), a preferential tariff quota that would give more certainty and transparency to importers. In doing so, Colombia could modify the tariff on rice and justify such a change before the FTAA countries. The MoA presented the measure to the Comité de Asuntos Aduaneros y Arancelarios a few weeks before starting the FTAA negotiations.

According to some of our interviewees, the argument with which the MoA initially justified the measure had to do with the fact that the PBS was not fulfilling its protection purpose. However, other interviewees pointed out that this measure was part of a defensive strategy that the MoA orchestrated in 2003, presumably with the approval of some sectoral business associations, to increase tariff rates before having to deliver a base tariff in a possible FTAA negotiation at that time, or with the U.S. later, if the FTAA initiative collapsed. Juan Ricardo Ortega, Deputy MoFT in 2004, mentioned that he attended a

[42] In 2005 the MFN tariff of the quota was set at 70% and reduced to 0% starting in 2008. The extra quota tariff MFN remains at 80%. Currently, this tariff treatment is different only for the U.S. under the TPA.

coordination meeting of Andean countries in Lima -at that time the Andean countries had the expectation of negotiating as a trade bloc with the U.S.- in which the MoA of Colombia presented a proposal to reform the tariff policy not only for rice but for agriculture in general, with a markedly protectionist orientation.

The FTAA eventually stagnated and Colombia began negotiating the TPA with the U.S. in 2004 on the basis of a new (higher) tariff for some agricultural products, including rice. Adopting the maximum consolidated level was a discretionary decision by Colombia and, as expected, this reform was badly received by the U.S. negotiating team which, once the negotiation began, expressed its annoyance for what it described as a "re-armament for the negotiation". Although it was not explicit in the reform, this was an ex-ante compensation mechanism that certainly facilitated the negotiation of the TPA. For rice producers this measure was a very important achievement. Fedearroz's position is reflected in a statement by its president to the *Vanguardia Liberal* daily in 2015: “the removal of that 80% import duty (a protection agreed in 2006 in the negotiations of the FTA that would give time to improve competitiveness) would ruin everything that is being implemented to catch-up and compete openly in international markets."

C. The political economy of support to sugar

1. Sector characterization

Colombia is among the main producers of sugar, but its output (2.3 million tons in 2016) is well below that of the two major players: Brazil (39 million tons) and India (25 million tons). Sugar cane has the largest volume share in total agricultural production (24.812.000 tons in 2015, almost 50% of agricultural production) and represents 4.7% of total harvested area (206.567 hectares in 2015), the sixth product in importance by area after coffee, palm oil, corn, rice and plantain. According to FAO, Colombia, together with Peru, is among the countries with the highest yields per hectare (Table 9).

Table 9. Sugar Cane Yields and Importance in World Production

	Average Yield	Importance in world production
Country	1990 - 2014	1990 - 2014
Brasil	710	32,2
India	677	20,6
China	650	6,4
Thailand	602	4,4
Mexico	734	3,4
Colombia	893	2,4
United States	776	2,1
Argentina	676	1,4
Peru	1198	0,6
World	571	

Source: author's calculations based on FAO data.

Production is concentrated in the department of Valle del Cauca. Historically, mills cultivated the product in large areas they owned. By the 1990s, however, they had adopted a scheme based on suppliers. Today, 25% of the land planted with sugarcane belongs to mills, the remaining 75% to cane growers.[43] The mills use a contract that allows them to exert control of around 50% of the cultivated area (Cepal, 2002).[44] The political clout of the sector is enhanced when thousands of small & medium size suppliers rather than a few big landowners are involved in production. In 2017 some 56% of production was sold in the domestic market, 27% exported and 17% destined to bioethanol production. In interviews for this study it became clear that exports and biofuels are important to manage surplus production.[45] More than 50% of output sold domestically is consumed by households, the rest is used as raw material in the food & beverage industry. The sugarcane agro-industrial chain includes 2750 growers, 13 mills, 6 bioethanol distilleries, 12 electric power cogeneration plants, 2 paper producing companies from sugarcane bagasse and 1 sucro-chemical company. In 2017 the main export markets were Peru, U.S., Ecuador and Chile.

[43] According to Asocaña, the average size of farms is 63 hectares, 69% having less than 60 hectares.

[44] These contracts include schemes like lease agreements, accounts in participation, contracts of suppliers in administration, generating medium-term relationships with cane growers.

[45] Colombia has put in place a policy geared towards fostering the production and use of biofuels – diesel from palm oil or ethanol from sugar. Notwithstanding the fact that this policy has merit along several dimensions –including environmental issues and the diversification of energy sources—it is quite evident, and this was confirmed to us by the head of an important sugar mill, that the introduction of the biofuels policy in the first half of the previous decade coincided with the dire situation of the sugar industry at the time.

Large economic groups own several sugar mills and concentrate around 65% of sales. They include the Manuelita group, a *multilatina* organization with interests in sugar, bioethanol, palm oil, fruits & vegetables, and aquaculture; the Riopaila group, with businesses in sugar, alcohol and palm oil; and the Ardila Lulle Group, leader in the production of soft drinks and vertically integrated with three of the largest sugar mills. This last group has the characteristic of not having a sugar business origin. In a move much praised by the sugarcane business association, the Ardila Group invested in this sector in order to have access to the main raw material for its soft drink industry. Additionally, this group has ample presence on TV, radio and the written press (see Table 6 in Chapter III).

Since 1959 sugar cane producers are represented by the Sugar Cane Producer´s Association (Asocaña). Its main activities include advising affiliates on market, social, legal and economic issues; coordinating the sector's position in trade negotiations; and managing the Sugar Price Stabilization Fund, FEPA (Appendix 3). Asocaña is composed of all sugar mills and a significant number of cane growers. The association´s activity has allowed the sugar sector to become one of the most organized and very active in research and technology through Cenicaña (R&D) and Tecnicaña (training and technology transfer)[46].

The sugar sector is recognized for its contribution to the development of the region in its area of influence. Arbelaez *et al*., (2010) analyzed the socioeconomic impact of the sugar sector and found that, in addition to its contribution to production and employment, the strategy of corporate social responsibility of sugar mills has allowed the municipalities where they operate to enjoy better living conditions compared to other agricultural municipalities. Nuñez, *et al.*, (2018) compared indicators for education, health, employment and GDP in sugar cane-producing municipalities with other municipalities of similar characteristics and found positive impacts stemming from the presence of the sugar sector.

2. The political economy of sugar trade policy

Mainly on account of the severe distortions that characterize the international market, Colombia´s sugar industry has developed in a mostly protected environment. These distortions originate mainly from large producing countries that, on account of their support

[46] In 1961 several of the mills joined to establish Ciamsa, a company dedicated to the international commercialization of sugar. Dicsa, which is no longer in operation, commercialized sugars within the country for uses in the animal feed industry, by liquor producers and in the sucro-chemical industry.

policies, generate huge supply surpluses. In addition, the international sugar market operates under a complex system of quotas in most of the importing countries that, at certain junctures, make it difficult to absorb these surpluses.

As was described in Section C of Chapter II, sugar has been covered by the Price Band System and also benefits from the FEPA, created in 2000. Analysts and the agroindustry have criticized its protectionist bias. At the center of the debate is the timeframe with which the price band adjusts to reflect international price trends (the floor and ceiling prices of the price band are estimated using prices of the previous 60 months). In the opinion of sugar producers, the mechanism does not isolate them from international price signals, while those in the downstream of the productive chain think otherwise.

Agricultural Law of 1993 created Price Stabilization Funds, FEP´s, with the purpose of promoting agricultural exports by compensating producers (in this case the mills) for the differential between the domestic and the international price, the former including tariff protection, thereby making them indifferent as to selling in either market. As explained in Appendix 3, FEP´s obtains funds from producers during favorable market conditions (defined as "cessions") and provides them with "compensations" when conditions become adverse. The main criticism laid on these mechanisms is that their operation influences market conditions to the extent that they can be used to exchange sensitive information among producers. In fact, this was one of the central issues in the 2012 investigation that the competition authority undertook with FEPA. Some adjustments were made to the information management policy by FEPA in 2016, as will be seen later. As established by the Agricultural Law, FEPA has a steering committee conformed by the MoA, the MoFT, seven members representing sugar producers and four who represent cane growers.

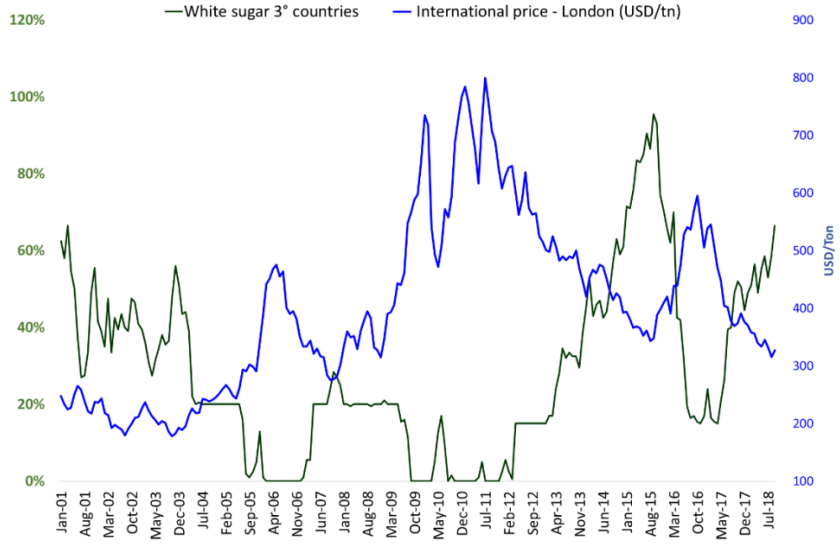
Some of our interviewees (academics and former officials) expressed the view that both the PBS and the stabilization funds were designed as transition mechanisms in order to stabilize domestic prices rather than to restore the protection in place before *Apertura*. They opined that the estimation methodologies and parameters used in practice were adapted to meet both stabilization *and* protection objectives. Besides, as in other sectors, sugar has numerous NTBs which not only increases prices but, in some cases, virtually close the market (Appendix 7). A relevant example in this regard was the requirement, in place

during 2009, to allow sugar imports exclusively through the port of Buenaventura (in the Pacific Coast), which makes imports from Brazil virtually impossible.

To respond to the complaints by the food processing industry regarding the anti-export bias of the tariff policy, in 1993 the sugar mills created the figure of joint exports according to which mills sell sugar to the food processing industry at international prices (i.e. without tariffs) if it will be used in products destined for exports. However, according to the food processing industry, this mechanism only attacks part of the competitiveness problem. Products like sweets, cookies and chocolates that are produced for the domestic market must use as raw material sugar purchased at a price (much) higher than the international price as a result of protection. This affects their competitive position vis á vis imported final products, in as much as the final products of this productive chain are not covered by the price band and were liberalized in FTAs signed by Colombia.

Trade policy for sugar has been managed with the same criteria used for other products of commercial agriculture[47], even though sugar is an exportable good. While the tariff resulting from the PBS has fulfilled the stabilization objective with which it was designed (in times of rising international prices the tariff is reduced, and vice versa), in some instances it has reached levels close to 100% (Figure 8).

Figure 8. White Sugar International Price and Colombia's Tariff Rate

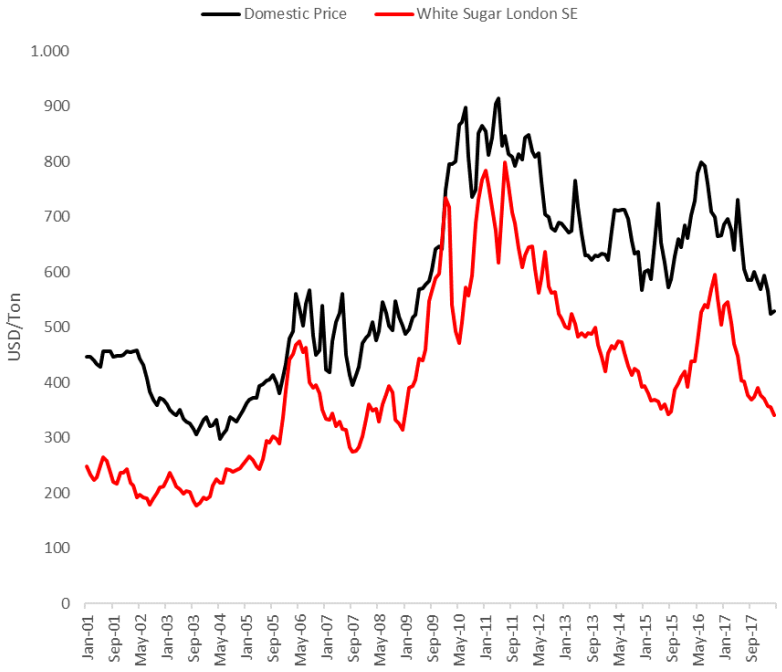


Source: Asocaña.

[47] Raw materials that are produced in large areas.

When comparing the international price with an estimate of the domestic price ex-mill (which considers the tariff resulting from the PBS), it is evident that there is a differential between the two, which has been expanding especially since 2011.

Figure 9. Domestic and International Sugar Prices



Source: Asocaña. Domestic price is an Ex-mill price of a FEPA survey

For the last two decades, the impact of raw materials prices covered by the PBS on the competitiveness of the food industry has been the subject of a permanent debate between the actors in the different productive chains and between the ministries of agriculture and foreign trade --the former taking sides with the agriculture sectors, the latter supporting the enhancement of competitiveness of the value chain. In the case of sugar, a key element in this discussion is its share in the cost structure of the sweets, confectionery and chocolate industry, a topic over which there is no consensus.[48] As will be seen in

[48] Espinal *et al.*, (2005) mention that sugar has a 26% share in the cost of candies. Leibovich (2014) presents information based on the 2007 input-output matrix according to which intermediate sugar purchases in confectionery represent 19% of production costs and 10.9% in chocolates. Piedrahita and Reina (2016) indicate that in the case of Nutresa –one of the most important downstream producers-- sugar´s participation in costs is 30% for chocolate for hot drinks, 20% in sweet cookies, 10% in ice cream and 8% in chocolates. Information provided by Asocaña gives account of a sugar participation of 6.95% in the cost structure of the sugar and chocolate sector, based on the 2009 I-O matrix. Asocaña also has made its own calculations for some products in which the sugar share in costs does not exceed 16%. The exercise for a chocolate pound cake of 70g shows a sugar weight of 4.7%; for a 12g candy bar 40%; and for a 19 gm lollypop 15.6%.

Section D, this dispute between sugar producers and the industry has been present in trade negotiations and was particularly strong in the TPA.

The controversy within this production chain shows that sugar mills interests have prevailed over industrial interests on account of: i) the importance of sugar for the agricultural sector and, particularly, for socio-economic development of Valle del Cauca. This is an aspect that has not only been recognized in the impact assessments of the sector, but also in Congress where it has been highlighted by left-wing senator Jorge Robledo when referring both to the fines imposed by the competition authority to Asocaña and sugar mills as well as during the debate on the tax on sugar-sweetened beverages; ii) the ties that sugar mills have with the political class through the financing of campaigns for Congress and the presidency.; and ii) the fact that there are very important firms, such as Postobon, vertically integrated with sugar mills.

The productive chain of sugar-confectionery, sweets and chocolates illustrates a political economy game involving powerful actors: a sugar industry that exhibits high yields and a processing industry which is among the most dynamic in exports, with significant growth since the mid 90s.[49] Several of the interviewees stated that although on many occasions the conflict within this chain has escalated to the level of the President, little progress regarding fundamental issues has been achieved.

Having said this, measures have been adopted to address some of the most salient distortions. Since 2015 some aspects of FEPA´s operation and of the methodology for calculating cessions and compensations have been reviewed as a result of the fines imposed on the sugar industry (more on this later). That same year, the government established a ceiling of 70% on the tariff resulting from the PBS.[50] According to the Committee on Customs and Tariff Matters[51], the committee was informed that one of the consequences of the PBS when tariffs are high is that they increase consumer prices and production costs of processed goods. As a result of this decision, the resulting tariff has fallen from an average

[49] Exports of coffee, refined sugar, confectionery & cocoa, and palm oil currently account for nearly 80% of agro-industrial exports. Within this group, confectionery products stand out as being very dynamic. Sweets and chocolates, which represented 1.8% of agro-industrial exports in 1991-1995, reached 8.8% in 2011-2015 (Perfetti, *et al.*, 2018).

[50] Present in the Committee, which was chaired by the Deputy MoFT, were representatives of the National Planning Department, DIAN, the Advisors of the CSCE and the Technical Secretary of the Committee. The representatives of the MoA and the Ministry of Mines and Energy are mentioned as absent.

[51] Minute #286 of the Committee on Customs and Tariff Matters of August 10 of 2015.

of 82% in 2015 to 55% in 2018. Despite these changes, in the interviews undertaken it was evident that the processing industry not vertically integrated considers that sugar producers were able to maintain their privileged conditions at the expense of industry, whose expectation is to have domestic prices that follow much more closely the international price. In fact, entrepreneurs and former government officials are of the view that sugar producers manage to maintain their position to protect the domestic market and seek access in foreign markets of interest at the expense of other actors in the productive chain.

3. Episode. In 2015, the competition authority fined Asocaña and 12 mills for cartelizing in order to block imports and ordered a revision of FEPA

Main actors: The Superintendence of Industry and Commerce (SIC),); The MoA; Asocaña, Ciamsa, Dicsa and the 12 sugar mills under investigation; firms that requested the investigation.

According to the SIC[52], in 2010 the Deputy MoFT referred a letter from manufacturers of *bocadillo* (a popular artisanal sweet) complaining about the negative impact on their activity of the sharp increase in sugar prices and the insufficient supply of the raw material. Later, Coca Cola FEMSA, Bavaria, Nestlé, Bimbo de Colombia, Compañía Nacional de Chocolates, Compañía de Galletas Noel, Meals and Casa Luker -- the most important national and multinational companies in the productive chain-- requested an investigation of the sugar market on account of what they claimed to be anti-competitive practices. The claimants argued that FEPA´s operation was going beyond determining cessions/compensations and was in effect being used to restrict competition.

In 2012 the investigation was formally opened, under the following charges: (i) Asocaña and the 12 mills were investigated for entering into an agreement to assign production quotas; (ii) Asocaña, Ciamsa, Dicsa and the 12 mills were investigated for entering into an agreement to prevent or obstruct the entry of third parties to the market.[53] The investigation was concluded in 2015 with the imposition of fines for corporate cartelization with the purpose of obstructing or restricting the entry of third parties to

[52] Resolution 5347 of 2012.
[53] Resolution 80847 of 2015, pg 4.

Colombia´s market.[54] The SIC found evidence that imports from Bolivia, Guatemala, El Salvador and Costa Rica had been restricted. In addition, it ordered a review of FEPA by its *Comité Directivo* and the national government, in order to ensure that it did not serve as an instrument to regulate production quotas or supply in the local market.

What is interesting for the purposes of this study is that although this episode did not have an impact on the PBS, it touched on two central aspects. First, the restriction (and for all practical purposes the impossibility) to import on account of binding NTBs; second, the effect that FEPA had on regulating supply. While the investigation did not have a direct impact on sugar prices, it brought to the forefront the debate on the conditions of competition in the market and set a precedent for the operation of other stabilization funds, some of which have also been questioned in the same sense as FEPA.[55]

After the imposition of fines by the SIC, the methodology --including parameters and formulas-- for estimating stabilization operations was modified and an information management policy was adopted. Both reforms were developed within the framework of the FEPA Steering Committee. The information management policy discriminates information as public, semi-private, private and reserved, and establishes the conditions for its delivery and dissemination. However, as stated in the interviews, the processing industry does not perceive structural changes in the problems that have characterized this market.

This episode illustrates how different actors approach the political economy game. Plaintiff companies managed to transfer part of the debate to a technical area. Although the demand was not related to price bands, it touched on the topic of prices in the domestic market and on FEPA´s impact in the market. In addition, plaintiffs took the issue out of the sphere of business organizations, several of the interviewees having pointed out that ANDI had not been effective in finding a solution to the conflict among the actors in the value-added chain due to the difficulty in reconciling the diverse interests of its affiliates.

Within the government, the issue of value-added chains has been a matter of much debate between the ministries of agriculture and foreign trade. According to entrepreneurs we interviewed, while the MoFT generally has the upper hand on technical issues, on

[54] Resolution 80847, pgs 4 and 187.

[55] In 2012, the SIC recommended monitoring the palm oil market to detect practices that could affect consumers through its FEP. Delegatura de Promocion de la Competencia, 2012. “Estudio de la Agroindustria de la Palma Africana en Colombia (2010-2011).”

account of political considerations the MoA usually manages to impose its point of view. Bringing the debate to the SIC, broke with that dynamic. Asocaña and the sugar mills investigated questioned the SIC for favoring the interests of large economic groups and multinational companies. The SIC replied that the obstruction of imports impacted consumers --be they intermediate or final-- and that its mandate was to promote proper economic efficiency.[56] The composition of the plaintiff group, including multinational corporations, was convenient to address an episode that reflected the difficult relationship among different actors in the production chain. Producers sought support from the MoA in explaining the nature of the FEPA and questioned that public officials, who act as members of FEPA´s Committee, were not investigated. Additionally, they challenged the SIC´s jurisdiction to investigate FEPA, a government intervention mechanism. The SIC pointed out that although it did not have the authority to fine FEPA administrators, it could very well order that its operation be amended.

4. Episode: tax on sugar-sweetened beverages

Although this episode is not directly related to trade policy, we present it in order to illustrate the power and mechanisms of influence of the sugar industry.

Main actors: MoH, MoF, Congress, the soft drinks industry[57], the media, sugar cane producers, sugar mills and ANDI.

Within the context of the 2016 Tax Reform, Colombia´s MoH and MoF raised the possibility of taxing sugar-sweetened beverages. The reform, submitted to Congress by the MoF, contemplated applying $300 tax per liter of sugar-sweetened beverage, approximately 20% of its commercial value. The purpose of the tax was to reduce consumption while generating additional revenue for the health sector. The discussion regarding this tax was quite heated; the sugar-sweetened beverage industry firmly opposed it and the project did not even reach the floor of the Congress.

[56] It should be noted that the superintendent who carried out this investigation was characterized by initiating numerous investigations into various sectors, most of which ended with hefty fines. They include investigation of anti-competitive practices to companies producing notebooks; toilet paper & diapers; and in the cement sector. In what has to do with consumers, companies in the tourism, education, automotive sales, and telecommunication sectors have also been fined.

[57] Colombia´s soft drinks market is dominated by two groups. The Ardila Lulle Group owns 5 brands that in 2017 controlled 50% of the market, with Postobon alone having a 26% market share. Its main competitor, CocaCola – FEMSA, is foreign-owned and has a 42% market share.

Many countries have applied taxes on sugar-sweetened beverages. Some studies question the benefits of these taxes for two reasons: (i) because an increase in prices does not bring about a decline in consumption; and (ii) because sugar-sweetened beverages are not the main cause of obesity and the prevalence of cardiovascular diseases. On the other hand, several studies highlight the potential benefits from taxation. According to a WHO report (2017), taxing sugar-sweetened beverages so as to increase prices by 20% might reduce consumption in a similar proportion[58]. This organization states that within a context of increasing prevalence of obesity, especially in developing countries, and of increasing type II diabetes diagnosis, taxation is a highly cost-effective solution.

Reputed scientists and public health academics supported the proposed measure (Universidad de los Andes, 2016). On the other hand, opposition to the tax was relentless and included the soft drinks industry, sugar mills, sugarcane producers and large trade associations such as Fenalco (representing the retail sector) and ANDI (representing manufacturing). Those in opposition argued that taxation would reduce sales and profits of sugarcane growers and retailers and would directly affect the production chain, with direct implications on output and employment. They also argued that public health issues such as obesity and overweight are due mainly to sedentarism and not to sugar consumption.

Even before the tax was included in the initial text of the Tax Reform, various stakeholders were lobbying against it. The carbonated beverage industry met with the MoH Alejandro Gaviria on various occasions, voicing the argument that taxation would have severe negative consequences on the industry[59]. It is worth mentioning that, as was reported by the NY Times, neither Coca Cola nor Pepsi visibly opposed the tax, leaving the spotlight to Postobon.[60] U.S. companies, rather than taking a lead on account of supposedly "carrying a big stick", stood on the side-lines as "free-riders" of the strong opposition undertaken by a locally-owned and very powerful economic consortium.

Lobbying against the tax increased after the government submitted draft legislation to Congress. In early December 2016 Congress summoned a public hearing in which various senators, from different political parties and ideologies, argued against the tax. Some

[58] According to Vecino *et al.,* (2016), a tax increase of 24% for sugar-sweetened beverages in Colombia would reduce obesity in adults in the bottom 2 quintiles of the income distribution by 5%.

[59] A small group of economists and public health experts supported the industry's lobbying against the tax. In spite of these efforts, the tax reform draft proposal did include taxation of sugar-sweetened beverages.

[60] https://www.nytimes.com/es/2017/11/13/colombia-impuesto-bebidas-azucaradas-obesidad/.

supported the soft-drinks industry, others sugarcane producers and several the labor unions. Once the MoH Gaviria finalized his presentation of the proposal, a member of congress told him that "I have never in the history of the Congress witnessed such strong lobbying as the one against this reform". Later that night, the Minister would be informed that the tax had been removed from the Tax Reform proposal.[61] In a meeting held by MoF Cárdenas with the speakers of Congress regarding the entire tax reform proposal, there was a unanimous and inflexible opposition to the sweetened-beverage tax and members of congress conditioned their support for the reform package to the removal of this tax.

The tax proposal not only received no political support whatsoever, it actually gave rise to the most unexpected of bed-fellows. The right-wing Centro Democrático party took a strong stance against the initiative arguing that sweetened-soft drinks only have limited responsibility on obesity and that, furthermore, the tax would heavily affect the poor.

In opposing the introduction of a tax on sweetened beverages, Centro Democrático's views were very much in agreement with those of the vociferous and highly influential leader of the left-wing Polo Democrático party who also argued that the tax would mainly affect the poor and would see a reduction in their consumption of other products, including healthy ones. Both parties expressed the view that the purpose of the tax was not to reduce consumption but rather to hike fiscal revenue.

According to the MoH during the time of these discussions, several media outlets played a key role in lobbying against the project, specifically those under the control of the Ardila Lulle Group. This conglomerate includes many businesses potentially affected by the proposed tax, including Postobon (Colombia's largest sweetened beverage company) and 3 large sugar refineries (Cauca, Providencia and Risaralda). Importantly, as was already mentioned, the Ardila Lulle Group owns RCN (a huge media conglomerate in radio and TV) and La Republica newspaper (see Table 6 in Chapter III). During the period in which the tax reform was discussed[62], RCN systematically questioned the proposal put forward by the MoH. Headlines such as "Taxes to sugar-sweetened beverages will affect employment" or "Increasing rejection towards the tax proposal on sugar-sweetened beverages" were recurrent. Over the radio, RCN and La FM (belonging to RCN)

[61] Conversation with Alejandro Gaviria, MoH at the time of the proposed reform (August 17, 2018).

[62] For easiness of access, our analysis is based on material published by the news organizations in their web page between the second semester of 2016 and the first semester of 2017.

consistently went against the tax proposal. These stations published in the Internet 10 texts dedicated to the tax, 8 of which harshly questioned it. In regards to television, RCN also attacked the government's proposal. Of the 27 TV entries, 18 were negative and only 2 mentioned the potential benefits of the proposed tax. In comparison, Caracol TV, RCN´s main competitor, much less intervened in the public debate, generally in a neutral and balanced manner[63]. Regarding the written press, La Republica criticized the tax proposal while, in sharp contrast, the two most important daily´s (El Tiempo and El Espectador, both part of important business conglomerates not involved in the sugar or the sweetened beverage industry) had a neutral if not favorable view with regard to the proposed tax. Finally, there were a few Op-Ed pieces in newspapers not related to the aforementioned economic group in which some analysts also opposed the tax reform[64].

Interestingly, the competition and consumer-protection authority, having played a key role in the process that delivered huge fines to the sugar industry on account of cartelization practices (as discussed above), this time around sided with the beverages industry and against consumers. In particular, via Resolution 59176 issued on September 7 of 2016, it ordered ASOCIACIÓN COLOMBIANA DE EDUCACIÓN AL CONSUMIDOR to immediately suppress a TV ad according to which the consumption of sugar-sweetened beverages had negative health effects. According to the SIC, the ad provide no verbal or visual scientific evidence supporting, among others (i) claims of the high sugar content of the beverages alluded to; (ii) incidence of sugar on the pathologies mentioned. In November 2017 the Constitutional Court upheld an April 2017 Supreme Court ruling ordering the SIC to revoke Resolution 59176. According to the Constitutional Court´s ruling (our translation) "timely access to this type of information facilitates protection and prevention on health matters by acknowledging plausible risks associated to the

[63] An example of this could be observed in the elections of Congress in 2014. According to public data from the Consejo Nacional Electoral and Transparencia por Colombia, RCN was the main contributor to the Senate and House of Representatives campaigns. RCN and RCN Radio financed a total of 89 candidates to the Senate (of which 22 were elected) and 7 to the House (of which 4were elected). Similarly, 4 sugar mills (Riopaila - Castilla, Manuelita, La Cabaña and Risaralda) financed 85 Senate candidates (of which 19 were elected), and a single representative to the House, who was not elected.

[64] The following articles in *Portafolio* are worth mentioning: by Andrés Espinosa "Perverse and regressive tax on sugar-sweetened beverages" (April 5, 2016) and "Regressive and confiscatory tax on sugar-sweetened beverages (November 22, 2016); by Mauricio Botero Caicedo "Taxes in Baby-sitting mode" (July 8, 2016).

consumption of these products while enabling consumers to freely choose the products they wish to consume".

D. Political economy issues in the Colombia - U.S. Trade Promotion Agreement

After strong diplomatic efforts by the administration of President Uribe, in August 2003 the U.S. Trade Representative, Robert Zoellick, announced its government's disposition to start negotiating free trade agreements with Colombia, Peru and Ecuador. That was the result of a series of simultaneous events. From the Colombian perspective, the interest in the agreement was purely economic and had to do with: i) the stagnation of the negotiations of the Free Trade of the Americas; ii) the proximity of the expiration date (2006) of the Andean Preference Act and Drug Eradication (ATPDEA)[65] which gave several Andean products preferential access to the U.S. market (around 40% of Colombian exports entered the U.S. via this program); and iii) the fact that other competing Latin-American countries[66] had signed or were in the process of signing an FTA with the U.S. In addition, there was a very close relationship between the Uribe administration and Busch's government. From the U.S. perspective, interest in the FTA was also merely trade related: i) after more than a decade of unilateral preferences, it was in its interest to negotiate full trade agreements in order to have access to these markets in more favorable conditions; ii) the Bush administration was committed to advancing free trade under the umbrella of "competitive liberalization", strongly promoted by Zoellick; and iii) the Trade Act of 2002 authorized President Bush to finalize the free trade agreement with Chile and to start negotiations with Singapore and Central America.

Negotiations between the two countries began in 2004; the TPA was signed on 2006 and was ratified by the Colombian Congress in 2007. It only entered into force on May 2012 since it took almost six years to get U.S. Congressional approval. The TPA marked a milestone in trade policy in the agricultural sector since, for the first time in decades, so-called "sensitive" products were subjected to liberalization, albeit with long tariff

[65] The Andean Trade Preference Act was enacted in 1991 to encourage Bolivia, Colombia, Ecuador and Peru to reduce coca cultivation and drug trafficking. The Act authorized the U.S. President to grant tariff preferences to qualifying products in order to foster trade and help these countries develop and strengthen legitimate industries. It was expanded in 2002 and became ATPDEA, granting free access to almost 5,600 products. The program highly benefitted Colombian exports, although its temporary nature (subject to renewals) prevented producers from taking full advantage of it.

[66] In particular, Central American countries, Chile and Peru.

elimination schedules. While the consolidation of ATPDEA preferences through the TPA benefitted cut flowers, textiles and apparel and leather products, in principle the big losers were rice, corn, and poultry products[67]. Sugar producers also consider they lost given the asymmetrical liberalization in favor of the U.S.

The TPA was approved despite the strong opposition exercised by traditional agricultural producers and associations at the highest levels of government and in Congress, having pushed for their products to be excluded from the agreement[68], as had been the case in all previous agreements signed by Colombia[69]. There are four key elements behind this outcome: i) under pressure from the U.S. and from some exporters and ATPDEA beneficiaries[70], President Uribe had decided to move forward with the agreement[71]; ii) compensation mechanisms were used to garner the support of sectors opposed to the agreement; iii) the MoFT and the chief negotiator were convinced of the benefits of the TPA; iv) negotiations were structured in a way that the MoFT was in full control of the process of negotiation in all sectors, including agriculture.

A relevant question has to do with whether the complex relationship between Colombia and the U.S. mediated by the financial aid provided ton Colombia to fight drugs and terrorism through the Plan Colombia[72], could have influenced the outcome of TPA and differentiated Colombia's TPA from other free trade agreements. On the one hand, it is evident that Colombia has been a strategic partner of the U.S. and at the time of the

[67] *Portafolio*, May 19, 2011 and *Dinero*, May 23, 2011.

[68] The exclusion of a product in an agreement by one country means that this product will not be subject to trade liberalization and no preferential treatment in its market will be given to the counterpart.

[69] With the exception of those signed with Andean countries and Mercosur.

[70] In a 2002 MoFT Survey regarding opinions on advancing free trade talks with the U.S., the President of Asocolflores opined that "This is the most important market with which we have the greatest linkages and geographical proximity. Furthermore, the U.S. is interested in negotiating with us now". http://www.mincit.gov.co/publicaciones/10601/respuestas_al_cuestionario_sobre_el_tratado_de_libre_comercio_con_estados_unidos.

[71] The first meeting between Robert Zoellick and President Uribe to formally discuss the FTA agreement between the two countries took place in Bogotá on August 6th, 2003. In this meeting Zoellick revealed the U.S. interest to reach an agreement similar to that recently signed with Chile, with no products excluded from tariff liberalization and with tariff phase-out periods of maximum 10 years. Uribe didn't accept the U.S-Chile FTA path. However, 6 days later Zoellick told farmers gathered in Des Moines, Iowa, that Uribe assured him that he would accept to eliminate all tariffs to agricultural products and other trade restrictions if the two countries decided to initiate negotiations towards an FTA (Espinosa and Pasculli, 2013).

[72] Through Plan Colombia, launched in 1999, the U.S. provided financial aid to Colombia to increase its military capacity in the fight against drugs. After the failure of the peace process with the FARC guerrilla movement under the administration of President Pastrana, financial resources were also oriented towards combating terrorism, very much in line with the U.S. global agenda against terrorism.

negotiations the "Política de Seguridad Democrática" of President Uribe was very much aligned with the U.S. global policy to combating terrorism. On the other hand, in the early 2000s the relationship between the two countries experienced difficulties mainly related with human rights in Colombia and with doubts in the U.S. Congress regarding the effectiveness of Plan Colombia in fighting drugs and terrorism. Indeed, in different occasions President Bush had to obtain waivers from Congress in order to avoid the suspension or reduction of financial aid[73].

In this context, there are two aspects that could have influenced the TPA outcome, working in opposite directions: Colombia´s strategic importance for the U.S. in fighting drug-trafficking and terrorism and Colombia´s dependence on financial aid through Plan Colombia. In our review of the different free trade agreements signed by the U.S. we did not find evidence supporting the notion that either of these two particularities of the Colombia-U.S. relationship affected the results of the trade agreement finally agreed upon between the two countries. The treatment the U.S. gave to Colombia was neither more "generous" than in other agreements nor was it more stringent and in virtually all of them all agricultural products were subjected to gradual liberalization.

1. The role of specific actors

In terms of scope, the TPA was the most comprehensive agreement signed by Colombia: It eliminated tariffs on goods and, for the first time in a bilateral agreement, removed barriers to services and dealt with customs administration and trade facilitation, technical barriers to trade, government procurement, investment and intellectual property rights, as well as two topics of especial relevance: labor and environmental protection. More actors actively participated in the negotiation than in previous agreements and an arsenal of communication channels was created in order to involve as many stakeholders as possible, helping legitimize the agreement. The government ascribed particular importance to the domestic support of the agreement and to creating the conditions for its approval when submitted to Congress. According to Jorge Humberto Botero, the MoFT at the time, the negotiation was segmented: while the chief negotiator dealt with the U.S., the Minister worked with in Colombia, interacting with civil society, regional interests, Congress and

[73] "Colombia y Estados Unidos: Desafíos de una Alianza", Policy Parer 6, part of the Project "La inserción de Colombia en un sistema internacional cambiante" launched in March 2003.

political parties. The Minister was active with regional chambers of commerce which are very influential as they have the capacity to undertake technical studies and lobby members of Congress, with whom he also intensively worked with[74].

To be sure, the strategy used by the government was effective in mitigating the opposition to the agreement and the TPA marked a milestone in the government's relationship with actors such as Congress, the Constitutional Court, trade unions and non-governmental organizations, who had not participated as actively in previous trade negotiations as the private sector had done.

Congress was involved in the negotiating process since it had to approve the accord, with no possibility of amending it. To diminish the risk of non-approval, the Government created a formal mechanism, "Cuarto de Acompañamiento del Congreso", that allowed congressmen to follow up on the negotiations and have first-hand information on their evolution. According to some interviews, in the first rounds of talks several Congressmen participated, but were not very active and attendance gradually diminished. However, some members of Congress were very dynamic in the follow-up of the agreement and were vocal about the potential negative effects for Colombian sensitive products. Moreover, after the TPA was signed, the Director of the Liberal Party and former President, Cesar Gaviria, assigned to Senator Cecilia Lopez, a member of his congressional delegation, the preparation of a technical study in support of the Party's opposition to the bill. The aim was to push for the re-negotiation of some products or at least to commit the government to advancing with compensation mechanisms for those most affected. However, at the last minute, when the bill was presented to Congress, Gaviria announced that his party would support the TPA as it was. In our conversation with her, Cecilia Lopez expressed the view that Gaviria went against the traditional protectionist view of his own party of protecting "sensitive" products, presumably because "he received an important last minute call". One can speculate that the call came from President Uribe himself who, notwithstanding Gaviria´s party opposition to trade liberalization, was confident the former President was persuadable on account of having launched the *Apertura* process in the early nineties.

[74] Miguel Gómez, director of the Colombian American Chamber of Commerce during the negotiation phase and later a member of the House of Representatives during 2010-2014, is of the view that while garnering political support for the treaty was certainly important, in his opinion its legal defense was even more critical, given that the Constitutional Court had the final saying, once it was approved in Congress.

The private sector actively participated during both the preparation process and the negotiations themselves and became heavily involved in the design of the matrices with Colombia´s negotiating position. It also attended the so-called "cuarto de al lado", a formal mechanism created to ensure private sector involvement and an appropriate *fora* for lobbying in an organized way. In addition, the private sector gathered in the Consejo Gremial Ampliado created a Technical Secretariat so as to have an interlocutor with the negotiating team and the ministers. All these formal channels did not prevent business from using direct channels of communication with the ministers and even the President. For instance, according to a former Ministry of Foreign Trade Jorge Humberto Botero, the big economic groups ("cacaos") interacted directly with the President.

The MoFT conducted the negotiations, led by the minister and a chief negotiator with full support of the President. Representatives of different ministries were present in the negotiations, in particular Agriculture and Social Protection, but all "thematic tables" were led by a representative of the MoFT. That helped the Ministry exercise control over the negotiation and was critical for the advancement of the negotiations, in particular regarding the agriculture sector. Since the very beginning, the ministers of Agriculture and of Social Protection, who acted in unison, opposed the agreement with the U.S. and might even have used strategies to sabotage it. According to chief negotiator Hernando José Gómez, "the negotiation within the government was by far much more difficult than that with the private sector". These ministers' position was highly conditioned by the interests of some agricultural producers and by the domestic pharmaceutical industry who exercised strong influence directly with the government at the highest levels and through their associations[75]. Their power was so strong that according to Hernando José Gómez, the MoFT had difficulties in hiring competent experts to lead the negotiation of the "agricultural table" as many were afraid of retaliation.

Free access to the Colombian market for so-called sensitive agricultural products (in particular cereals, rice, wheat, soy, as defined in chapter 1), coupled with the elimination of

[75] For instance, in the case of agriculture the associations are SAC, Andi, Asocaña, Fedegan, Fedepalma, and in the case of pharmaceutical Asinfar. Officials from the World Health Organization and the Pan American Health Organization also exercised strong pressure.

price bands was of particular interests to the U.S[76]. At the same time, the position of Colombia´s MoA was to exclude these products from the agreement and maintain the price bands. Another critical issue for the U.S. was intellectual property rights, Colombia´s Minister of Social Protection seeking to protect domestic pharmaceuticals. Negotiations were particularly complex in these two areas, the last ones to be agreed upon.

Initially, in the TPA negotiations Colombia classified agricultural products according to their sensitivity: i) hypersensitive, which included chicken leg quarters, rice, yellow corn and red beans; ii) sensitive, composed of pork and beef, soy and corn oils, sorghum, soy, cassava, powdered milk, dairy products, soy flour, glucose, fructose, wheat, barley and pet food; and iii) easy tradable which included livestock, fruits, legumes, vegetables, flowers, cotton, candy products and chocolate, among others. The Colombian position was rather offensive with regard to refined sugar, seeking ample access to the U.S. For the ATPDEA beneficiaries, the goal was to consolidate the preferences they already enjoyed.

The position of the MoA was inflexible to the point where it blocked the negotiations between the two countries. It was only after direct intervention by the President, mediating between the different ministers, and the arrival of a new more pro-openness MoA that negotiations resumed. In the end, agricultural issues were negotiated directly by the new Minister and the chief negotiator. According to an interview, had it not been for Minister Arias' vision, it would not have been possible to negotiate agriculture in the terms it was agreed, and therefore it would not have been possible to finalize the TPA.

2. The outcome

Sugar was one difficult product in the negotiation. While Colombia wanted a high TRQ to access the U.S. market and glucose to be excluded from the TPA, the U.S. excluded sugar from the agreement[77] (the only exclusion) and requested preferential access to the Colombian glucose market. In the end, the U.S. granted Colombia a TRQ of 50,000 tons with a yearly increase of 750 tons and Colombia granted a gradual tariff phase-out of 15

[76] Since the beginning of the negotiations, the U.S. requested that all products should be included in the agreement to access the Colombian market and all should end without any tariff. Therefore, the instruments in which Colombia had room for maneuver were the phase-out period, the use of tariff-rate quotas (TRQ) and the use of special safeguard clauses (Espinosa and Pascualli, 2013).

[77] The exclusion means that Colombian sugar will never have a preferential treatment to access the U.S. market, with the exception of the TRQ which has a tariff of cero.

years for both sugar and glucose[78] (Table 10). This was perceived by sugar producers and associations as an asymmetrical agreement in favor of the U.S.

It is worth noting that sugar had been excluded from all previous trade agreements[79] but this outcome was not feasible with the U.S. as a counterpart, despite the influence at the highest level of Government and in Congress of Colombian producers. Sugar was even excluded in the agreement with Mercosur signed prior to the TPA, also during the Uribe administration. According to Juan Ricardo Ortega, who at the time was Deputy MoFT, President Uribe "was directly involved in the negotiating position of the agricultural sector" and, for instance, gave instructions to exclude sugar from the agreement".[80]

The TPA negatively affected manufacturers of products with high content of sugar since their exports to the U.S. would have to share the same (low) TRQ while, simultaneously, sugar remained protected during a long phase-out period of 15 years. According to interviews with industry producers not vertically integrated with sugar producers, although in the "cuarto de al lado" sugar producers and agroindustry had reached a pre-agreement on the position to be presented to the U.S., the final outcome was more favorable for sugar refiners than for the food-processing industry.

Rice was one of the last products to be negotiated. While Colombia wanted to exclude it from the TPA, access to the Colombian market was one of the main interests for the U.S. In the end, and as an exchange for the exclusion of sugar by the U.S., Colombia achieved a very long tariff phase-out scheme for rice, with 19 years in total with 6 years of grace, as well as a special safeguard clause[81]. However, Colombia also granted a TRQ of 79,000 tons for imports of U.S. rice, which increases every year (Table 10)[82]. As in the case of sugar, with few exceptions rice had been excluded from all trade agreements signed by Colombia.[83] Given the size of U.S. production, this constitutes a significant change in trade policy of rice and poses new challenges for rice producers who see the need to increase

[78] It began in 2012 and will reach full liberalization in 2027.

[79] With the exception of the Comunidad Andina de Naciones (CAN)

[80] Sugar was included in the agreement with the European Union with long phase-out periods and was excluded in the Pacific Alliance due to a request from Mexico.

[81] As an exchange for the exclusion of sugar, the U.S. offered Colombia the possibility of also excluding a product that was not relevant for Colombia. The chief negotiator decided instead to obtain longer tariff phase-out periods for sensitive products such as rice and poultry.

[82] Given the increase in the TRQ rate, in 2017 imports from the U.S. were 98,000 tons.

[83] It was included in the agreement with Mercosur, giving gradual access to Uruguay. In the trade agreement with the European Union negotiated after the TPA, rice was once again excluded.

their productivity in order to face U.S. competition (see section B). Tariff will start declining in in 2019 and will reach cero in 2031. It should be noted that other sensitive products were also subject to a gradual tariff phase-out for the first time in a free trade agreement, some of them with special safeguard clauses (Table 10).

Table 10. Sensitive Products

	Base Tariff	Tariff Phase-out	TRQ (Ton)	TRQ Annual Increase	Special Safeguard*
Rice	80%	19 years (6 years grace)	79,000*	4.5%	120% of TRQ
Poultry and leg-quarters	70% - 164.4% (leg-quarters)	18 years (5 to 10 years grace)	26.000 (leg-quarters) 400 (poultry)	3% - 4%	130% of TRQ
Dairy Products	20% - 33%	11 to 15 years	100 - 5000	10.0%	
Sugar and Glucose	28% - 47%	15 years			
Fresh Beef Meat and Offal	80%	10 years	2.000 (Fresh meat) 4.400 (offal)	5.0%	140% of TRQ (fresh meat)
Beans	60%	10 years	15,000	5.0%	120% of TRQ
Corn, Corn Products and Sorghum	15% - 28%	8 to 10 years	8,000 - 2 millones (yellow corn)	5% - 8%	
Soybean Oil	24%	10 years	30,000	3.0%	

* An automatic safeguard clause is triggered when import volumes exceed X% of the TRQ

At the very end of the negotiations, and influenced by the problems that PBS were causing at the WTO and in other fora, the mechanism was eliminated with the U.S. This is an unprecedented issue, as for the first and only time Colombia gave up the use of PBS[84], and in that move the pro-openness orientation of the negotiators played a critical role.

3. Compensation mechanisms

As Colombia opened its market for the first time to "sensitive" products, gave up the price bands and accepted an asymmetrical negotiation for sugar, the Government offered a series of compensation mechanisms under the umbrella of the "Agenda Interna", an "umbrella" program aimed at providing the private sector with both public goods and mechanisms to help improve competitiveness (Box 1). Those mechanisms were vital for the government to

[84] Price bands were not eliminated in other trade agreements. For instance, Canada allowed them as it excluded several agricultural products and uses similar tools in some of its products. In the case of the EU, many countries have different kinds of combined tariffs.

garner the support of the private sector, in particular from agriculture. One very important initiative for the agricultural sector was Agro Ingreso Seguro (AIS). According to Cecilia López, the private sector and agricultural associations "allowed themselves to be bought with this mechanism". Furthermore, in her opinion "the emergence of AIS lowered the level of the debate in Congress".

The Agenda Interna and AIS failed to fulfill the private sector´s expectations and discomfort among "sensitive" agricultural products still persists. As a result, ever since the TPA was negotiated they have opposed the inclusion of these products in trade agreements[85] and often organize protests requesting the re-negotiation of previous ones. As a general note, it can be argued that the lack of delivery of compensation mechanisms exacerbates protectionism and anti-export bias.

There was also a general perception in the agricultural sector that the TPA was unfavorable for them, while it benefited manufacturing—i.e. they bore the cost of consolidating ATPDEA. As pointed out by Olga Lucía Lozano, a former vice minister of MoFT, "there is TPA trauma in the agricultural sector. They feel they were the big losers and feel they already paid the bill" and therefore seek agreements in which the agriculture might benefit to compensate the costs of the TPA[86].

Another compensation element was the creation of a mechanism of administration of the tariff quota through an Export Trading Company (ETC) which gives rice growers resources to enhance productivity. The ETC is composed of trade associations representing the rice industries of both countries as well as the six U.S. Rice Research & Promotion Boards. Fedearroz participates on behalf of Colombia. The mechanism will remain in place until the tariff quota ceases to operate and the market is opened. The ETC manages the quota through an auction in which interested U.S. exporters participate. Benefits obtained from the auction are shared between producers of the two countries and in Colombia are being used for Fedearroz to provide technical support and were also recently used to build storage and milling plants in various zones of the country. Thus, the resources derived from the ETC are not only being used to improve productive aspects but have generated a realignment of the relative power of the different actors in the productive chain. Fedearroz

[85] In the trade agreement signed with the European Union sensitive products such as corn, rice, meat, poultry were excluded. Sugar and dairy products were included, with long phase-out periods.

[86] For instance, South Korea and China.

is complementing this strategy with a white rice commercialization program it plans to implement with supermarkets and through the opening of more than 20 stores in several cities. These strategies are geared towards capturing part of the commercialization margin currently appropriated by millers and retailers.

Finally, as mentioned in section B.2., the substitution of the PBS for fixed tariffs and the inclusion of some agricultural products (like beans and beef) in that special treatment, which implied in both cases an increase in tariffs not only for the negotiation with the U.S. but also for the MFN tariff, also facilitated the negotiation of sensitive products. As mentioned before, in the specific case of rice that reform resulted in a flat tariff of 80%, much higher than that resulting from the PBS.

Box 1. Compensation Mechanisms

In view of the need to prepare the agricultural sector for the challenges of the TPA, 2004 the government defined the Domestic Agenda (Agenda Interna), only two months after negotiations began. The goal was to adjust the productive structure, infrastructure and institutions towards a new development model. It was headed by the National Planning Department and various ministries, regional leaders, the Consejo Gremial Ampliado, Trade Union Confederations, an academic, and members of Congress also participated.

The Agenda was conceived from a diagnosis and assessment of regional and national needs. It included the following general actions: strengthen the system of sanitary and phyto-sanitary measures; develop technologies for value-added chains; identify strategic needs for irrigation and drainage; planning for the construction of irrigation districts; develop an agenda focused on research; improve custom control information systems; identify, prioritize tertiary and peripheral roads.

A key part of the Agenda was conceived under the Regional Development Plans and each region identified sectors in which to prioritize productive development projects. Some 60% of the 293 productive plans selected corresponded to agriculture and agro industry. Rice and sugar's proposals were particularly relevant for two departments, Tolima and Valle del Cauca. Tolima remains one of the largest rice producers goal was to increase productivity and optimize. To this end, it was necessary to introduce new varieties for the short cycle, highly resistant to droughts, and to gain access to genetically modified seeds, all complemented by crop rotation and transfer of new technologies.

Valle del Cauca's main proposal was to strengthen the sugarcane production chain, a project that was prioritized due to its importance in generating biofuels, particularly ethanol, while consolidating the production of refined sugar and its derivatives. To this end, the sugar cane productive chain had to be better articulated, accompanied by an improvement in transportation and storage infrastructure, as well as R&D. The development plan also included welfare policies for workers in order to increase productivity, enhance port logistics, and have better regional security conditions.

One of the most important measures contemplated in the Agenda, was the Agro Ingreso Seguro grant program (AIS) designed in 2006 and which sought a better insertion of agriculture in international markets through different trade negotiations. Its goal was to protect, stabilize and ensure farmers' profits on account of international market distortions; improve competitiveness and productivity; and guarantee food security. First, there were direct economic aid and incentives to farmers consisting of transitory and decreasing monetary payments granted for every acre planted, promoting the increase in production. Second, there were resources aimed at strengthening technical assistance, promoting technological improvements, providing adequate irrigation and drainage, supporting commercialization and association of farmers, strengthening a sanitary and phyto-sanitary system and expanding access to credit.

The prioritization and allocation of AIS resources were defined by the Intersectoral Committee, presided by the MoA and comprised by other ministries and the Presidents of SAC, Fenavi and Fedegan. Palm oil, livestock and coffee producers were the most benefited, as they received 44% of the loans of the Incentive for Rural Capitalization. Rice producers received 7.3% (the fourth most benefited sector), distributed amongst 778 projects. Sugarcane producers received 2.3%, distributed amongst 94 projects (the second most benefited per beneficiary). Considering all aid towards the development of irrigation systems, sugarcane and rice producers received 7% and 3% of total resources, respectively, in contrast to 20% granted to palm oil producers, by far the most benefited sector by AIS. The program was designed to last a long time but was terminated in 2011 as a result of accusations of public resources misuse.

Progress has fallen way short of expectations and after 14 years of the Agenda's launch and 6 years since the implementation of the TPA, Colombia is still lagging in competitiveness: in the Global Competitiveness Index, Colombia went from 63rd place out of 122 in 2006, to 66th out of 137 in 2017.

IV. Conclusions and recommendations

Despite the liberalization policy that took place in the nineties, part of the agriculture sector remains highly protected. This has induced and supported a weak performance of several sub-sectors, the major concern being that the cost of this trade policy is borne by consumers --particularly the poorest households, who pay high prices for goods that heavily weight in the consumption basket—and by downstream producers in the value chain.

The TPA was the first time in which sensitive products were liberalized, albeit gradually, an unprecedented outcome that imposes important challenges in terms of enhancing productivity and competitiveness. This achievement was aided by the use of compensation mechanisms of various types --including the increase in protection for some products prior to the tariff reduction program, the adoption of a program of aid and incentives to farmers, and a broad agenda of national and regional policies (Agenda

Interna) that sought to improve competitiveness. Unfortunately, the most relevant compensation mechanisms fell short of expectations. This lack of delivery set a bad precedent and could have strengthened the voice of those who call for more protection.

The protectionist policy stance is the result of political interactions that have not changed much since the *Apertura*. The interviews conducted for this study made it clear that in order to generate a change in this dynamic, it is necessary that interventions in agriculture be focused on delivering public goods rather than in direct support of producers. The improvement of road infrastructure, the supply of technological packages and a more strategic policy of irrigation districts are identified as priority areas to boost agriculture and Colombia´s insertion in international market. Such a change should promote productivity and competitiveness, benefitting consumers and enabling value-added chains and exports. For rice and other cereals, enhancing storage infrastructure is particularly relevant.

The protectionist bias has persisted to a large extent due to highly politicized agricultural institutions which lack technical capacity, starting with the MoA and replicated in subordinated entities. This has favored the capture of public policy by powerful sectors that seek to maintain protection. The proposal to change this pattern made by the Minister of Agriculture of the recently inaugurated Duque administration goes in the right direction. Interviewees for this study perceive the MoFT as a technical entity, but with a limited scope when dealing with agriculture. As a result, a protectionist vision of the sector prevails. Our analysis of rice and sugar show that when a more technical public institution such as Superintendence of Industry and Commerce becomes involved, critical issues such as consumer protection and promotion of free markets and competition are better upheld.

The “sensitive” agricultural private sector is well organized in associations that exercise strong influence at all levels, including Congress. In some cases, this has to do with powerful traditional families having access to the highest levels of government. Economic groups also play a critical role and, as in other countries, their influence is particularly strong when they control the media. Given the case studies chosen, we highlighted the role played by one of the large economic conglomerates, but it is important to bear in mind that, unfortunately, several large business organizations exert significant control over the media.

Several interviewees pointed out that formal channels for government and private sector coordination are in many cases inoperative, favoring informal channels such as the direct communication of businessmen, associations and economic groups with the government at the highest levels. Existing channels such as the Comisión Mixta de Competitividad y Comercio Exterior should become the prevailing forum for coordination between the public and the private sectors, as well as with other relevant actors.

Interviewees also drew attention to the negative impact that the institutional architecture has on coordination within the government, generating inefficiencies and contradictory policies, which in turn open spaces for the capture of policies by the private sector. The institutional framework governing trade policy is complex, hampering trade and making it particularly vulnerable to the influence of private interests. Although the MoFT is a technical-oriented institution, its capacity to define and coordinate trade policy diluted after the Apertura. In line with García et *al*. (2015), it is therefore critical to promote efficiency and coordination among entities in charge of trade policy. The role of the MoFT and the Consejo Superior de Comercio Exterior should be strengthened and should promote actions intended to improve coordination of entities involved in international trade. The MoFT should also reinforce a productive chain vision and be more aggressive in seeking new markets for Colombian exports. Since *Apertura,* bilateral and regional trade agreements have been key instruments in order to open markets and the intensions of the Duque administration of not moving forward in that direction is a matter of concern.

V. Appendices

APPENDIX 1. Tariff–rate quotas for Agriculture in Colombia´s FTAs

Trade agreement	Number of agricultural TRQs included	Products
Canada	5	Bovine meat cuts with bone, bovine meat cuts boneless, bovine offal, pork meat, beans
EFTA	3	Fresh cheese, melted cheese, other cheese
Mexico	10	Bovine meat, boneless; powder milk; butter; butter oil; cheese; wheat flour; wheat grains; soya oil; caramel (*arequipe*); beverages containing milk
Northern triangle	3	Animal feed (one opening for Guatemala and another for Honduras), ethyl alcohol
Andean community	1	Rice (quotas in place during 2009-10 also for yellow and white maize and soybeans)
United States	19	Bovine meat, bovine offal, chicken meat, chicken legs, powder milk, yoghourt, butter, cheese, processed dairy, ice-cream, beans, yellow maize, white maize, sorghum, glucose, pet food, animal feed, rice, crude soy oil
European Union	17	Sugar, bovine offal, livers and tongues, ice-cream, sugar syrups, whey, condensed milk, powder milk, baby milk, sugar confectionery, cheese, yoghourt
Mercosur	13	Fresh or frozen bovine meat, boneless bovine meat, bovine meat cuts boneless, bovine offal, milk and cream, sugar confectionery excluding cocoa, chocolate and other food preparations containing cocoa, milk in powder
Total	71	

Source: OECD (2015), based on MADR

APPENDIX 2. Special Agricultural Safeguards Applied During 1999 – 2013

Products	Measure	Trade partner	Year of application
Rice	95 000 tonnes quota	Ecuador	1999
Rice	123 000 tonnes quota	CAN	2002
Rice	150 000 tonnes quota	CAN	2003
Oils and fats	29% tariff	CAN	2002
Sugar	35 000 tonnes quota	CAN	2004
Oils	6 267 tonnes quota	Argentina	2013
Oils	12 012 tonnes quota	Argentina	2013
Powdered milk	993 tonnes quota	Argentina	2013
Oils	21 tonnes quota	Brazil	2013
Oils	6 804 tonnes quota	Brazil	2013

Source: OECD (2015), based on MADR.

APPENDIX 3. Price Stabilization Funds

Price stabilization funds (FEP) seek to stabilize producer income, regulate production and promote exports. FEPs obtain funds from producers during favorable market conditions and provides them with compensations when market conditions become adverse. Currently, there are FEPs in operation for cocoa, cotton, palm oil, sugar and beef, and milk and their derivatives. They are all administered by the respective producer´s associations. Under

certain conditions, these privately-run stabilization funds may receive government support. Several FEPs have been questioned because their operation might impede competition. Also subject to criticism is the fact that there is a bias in the estimation of prices, yielding, at the expense of consumers, prices higher than those prevalent in international markets.

APPENDIX 4. UNCTAD Non-Tariff Measures

	Chapter		Institution
Technical Measures	A	Sanitary and Phytosanitary Measures	ICA, INVIMA, Ministerio de Protección Social
	B	Technical Barriers to Trade	INVIMA, INCOMEX, Ministerio de Protección Social, Ministerio de Agricultura, Ministerio de Salud, ICA
	C	Pre-Shipment Inspection and other formalities	DIAN, ICA
Non - technical Measures	D	Contingent Trade - protective Measures: Antidumping & Saveguards	Ministerio de Comercio
	E	Non - automatic Licencing, Quotas, Prohibitions and Quantity Control Measures	Consejo Superior de Comercio Exterior, Ministerio de Comercio, Ministerio de Agricultura, INCOMEX
	F	Price - control Measures	Ministerio de Agricultura, Ministerio de Comercio
	G	Finance Measures	
	H	Measures Affecting Competition	Ministerio de Defensa Nacional
	I	Trade - related Investment Measures	
	J	Distribution Restrictions	
	K	Restrictions in Post - sales Services	
	L	Subsidies	
	M	Government Procurement Restrictions	
	N	Intellectual Property	
	O	Rules of Origin	
Exports	P	Export - related Measures	ICA, Ministerio de Comercio Exterior

Source: Authors' elaboration based on UNCTAD & WITS. ICA: Instituto Colombiano Agropecuario; INVIMA: El Instituto Nacional de Vigilancia de Medicamentos y Alimentos; DIAN: Dirección de Impuestos y Aduanas Nacionales; INCOMEX: Instituto Colombiano de Comercio Exterior.

APPENDIX 5. Members of Consejo Gremial Nacional

Name	Detail	Sector	Memeber since:
ACOLFA	Autoparts	Manufacturing	1991//1993
ACOPI	Small & medium-size enterprises	Manufacturing	1991//1993
ACOPLASTICOS	Plastics	Manufacturing	1991//1993
ANALDEX*	Foreign trade	Umbrella organization	1991//1993
ANDI**	Manufacturing	Umbrella organization	1991//1993
ASOCAÑA	Sugar cane growers	Agriculture	1991//1993
FEDEGAN	Livestock	Agriculture	1991//1993
SAC***	Agriculture	Umbrella organization	1991//1993
ASOCOLFLORES	Cut-flower exporters	Agriculture	1991//1993
FEDEPALMA	Palm oil growers	Agriculture	2012
ANDESCO	Public utilities & communications	Services	2012
Cámara Colombiana de la Infraesturcutra	Infrastructure	Services	2004
COLFECAR	Cargo hauling	Services	1994
CONFECÁMARAS	Chambers of Commerce	Services	2001
COTELCO	Tourism	Services	2001
CAMACOL	Construction	Services	1991//1993
ASOFIDUCIARIAS	Trust companies	Financial	2004
ASOFONDOS	Private pension funds	Financial	2004
ASOBANCARIA	Banks and financial institutions	Financial	1991//1993
FASECOLDA	Insurance companies	Financial	1991//1993
FENALCO	Retailers	Retail	1991//1993

Notes: *Comprises 211businesses in different sub-sectors. ** Comprises 27 chambers representing different business organizations. *** Representing 27 business organizations.

APPENDIX 6. Rice Non – Tariff Barriers

Rice Non-Tariff Barriers, 2015				
	% affected Subheadings	**Paddy rice**	**Peeled rice**	**Institution**
A	**Sanitary and phytosanitary measures**			
A1	Prohibitions/restrictions of imports for sanitary and phytosanitary reasons	100	100	ICA, INVIMA
A2	Tolerance limits for residues or contamination by certain substances	100	100	Ministerio de Salud
A4	Hygienic requirements	100		ICA
A8	Conformity assessment related to sanitary and phytosanitary measures	100	100	ICA
B	**Technical barriers to trade**			
B1	Import prohibitions/restrictions for objectives set out in the TBT agreement	100	100	Incomex, INVIMA, ICA
B3	Requirements for labeling, marking, and packaging	100	100	ICA, Ministerio de Salud
B8	Conformity assessment related to TBT conditions	100	100	Ministerio de Salud; Ministerio de Agricultura; Incomex e INVIMA
C	**Pre-shipment inspection and other formalities**			
C3	Requirement to pass through a specified port of customs	100	100	ICA
E	**Non-automatic licenses, quotas, prohibitions and quantity control measures**			
E1	Non-automatic import licensing procedures	100	100	Ministerio de Comercio
E6	Tariff-rate quotas	100	100	Ministerio de Hacienda, Ministerio de Agricultura y Ministerio de Comercio
F	**Price control measures, including charges and additional taxes**			
F3	Variable charges	50	100	Ministerio de Comercio y Consejo Superior de Comercio Exterior

APPENDIX 7. Sugar Non-Tariff Barriers (2015)

Sugar Non-Tariff Barriers, 2015				
		% affected Subheadings	Number of affected subheadings	Institution
A	**Sanitary and phytosanitary measures**			
A1	Prohibitions/restrictions of imports for sanitary and phytosanitary reasons	88.8	8	Incomex; INVIMA
A4	Hygienic requirements	11.11	1	Ministerio de Salud
A8	Conformity assessment related to sanitary and phytosanitary measures	100	9	Ministerio de Salud; INVIMA; ICA;
B	**Technical barriers to trade**			
B1	Import prohibitions/restrictions for objectives set out in the TBT agreement	100	9	Incomex; INVIMA; Ministerio de Salud
B3	Requirements for labeling, marking, and packaging	88.88	8	Ministerio de Salud
B7	Product quality and performance requirements	88.88	8	Ministerio de Salud
B8	Conformity assessment related to TBT conditions	88.88	8	Ministerio de Salud; Ministerio de Agricultura, Incomex; INVIMA
C	**Pre-shipment inspection and other formalities**			
C3	Requirement to pass through a specified port of customs	100	9	ICA
E	**Non-automatic licensing, quotas, prohibitions and quantity control measures**			
E1	Non-automatic import licensing procedures	88.88	8	Ministerio de Comercio
F	**Price control measures, including charges and additional taxes**			
F3	Variable charges	77.77	7	Ministerio de Comercio; Consejo Superior de Comercio Exterior

Source: Authors' calculations based on Perfetti & Botero (2018).

APPENDIX 8. Labor Unionization (%)*

	Type of Union			Economic sector								
Year	Craft	Firm	Industry	Agriculture, forest and fishing	Oil & Mining	Manufacturing	Public Services (Electricity, gas and water supply)	Construction	Wholesale, retail, accommodation and food service	Transportation, storage and communication	Financial and insurance activities	Real estate activities	Other service activities
1984				1.8	12.7	8.1	53.2	3.9	3.0	51.4	12.8	-	19.6
1990				1.5	4.9	8.2	42.0	3.0	2.6	27.4	14.3	-	18.4
2010	53.6	24.2	21.9	2.1	4.9	3.4	23.6	0.6	1.5	4.3	9.7	0.5	11.8
2013	53.7	23.4	22.6	2.3	5.3	3.6	21.4	0.6	1.5	4.1	8.4	0.5	11.3
2016	49.4	23.2	26.8	2.6	10.4	4.7	26.8	0.6	1.6	4.8	7.5	0.9	12.2

Notes: * Percentages based on number of workers affiliated.

Source: 2010 – 2016, Sistema de Información Sindical y Laboral (SISLAB). For 1984 and 1990, Edwards & Steiner (2008).

APPENDIX 9. Semi-structured Interviews

Name	Profile
Jorge H. Botero	Former Minister of Foreign Trade
Carlos G. Cano	Former Minister of Agriculture; former president of SAC; former president of National Federation of Rice Growers
Rosario Córdoba	President of the Private Council on Competitiveness
Javier Díaz	President National Association of Foreign Trade (Analdex)
Juan José Echavarría	Former deputy minister of foreign trade; Director of the 2015 project on a tariff reform proposal
Carlos Ignacio Gallego	President of Grupo Nutresa
Hernando José Gómez	Former Negotiator of the US-Colombia FTA
Miguel Gómez	Former congressman; former director American Chamber of Commerce in Colombia
Silverio Gómez	Director of ANDI´s Industrial Rice Chamber
Harold Éder	President of Ingenio Manuelita S.A
Rafael Hernandez	President of Rice Growers Federation
Rudolf Hommes	Former Finance Minister
Ana María Ibañez	Academic expert on land concentration and informality
Roberto Junguito	Former Minister of Agriculture and of Finance
José Leibovich	Independent consultant on agriculture & trade
Cecilia López	Former Minister of Agriculture and dormer Senator
Olga Lucía Lozano	Former Deputy Minister of Foreign Trade
Juan Carlos Mira	President of the Sugarcane Growers Association
José Antonio Ocampo	Former Minister of Agriculture; Director of the Mission for the Transformation of Agriculture 2014
Juan Ricardo Ortega	Former Deputy Minister of Foreign Trade
Juan José Perfetti	Former deputy Minister of Agriculture; Independent consultant on agriculture & trade
Carlos E. Piedrahita	Former president Grupo Nutresa

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