

Agriculture in the Dominican Republic: Competitiveness in a New Trade Regime and Lessons for Cuba

Sarita D. Jackson

Abstract—Agriculture remains a sensitive issue during multilateral trade negotiations within the World Trade Organization (WTO). Similar problems arise at the bilateral level, as in the case of trade talks between the United States and the Dominican Republic. The study explores the determinant of agricultural industry competitiveness in the 21st century, particularly in the case of U.S. and Dominican agriculture in each other's market. Complementing existing scholarship on industry competitiveness, the study argues that trade rules that are established under preferential access programs and trade agreements play a significant role in shaping an industry's ability to compete. The final analysis is used to offer recommendations to the same sector in Cuba. Cuba currently relies heavily on U.S. food imports and is experiencing the gradual opening of trade with the United States.

Keywords—Agriculture, bargaining, competitiveness, Dominican Republic, DR-CAFTA, free trade agreement, institutions.

I. INTRODUCTION

THE Dominican Republic, as with many developing countries, still relies on agricultural production as an important sector for the economy. This sector goes beyond meeting the dietary needs of the Dominican population to also being an important source of employment and revenue. Due to the significance of the industry domestically, many agricultural producers were not originally enthusiastic about the Dominican Republic entering trade talks with the United States, as explained by industry representative José Ramón Peralta and U.S. Agency for International Development (USAID) economic policy coordinator Luis González during 2010 personal interviews in the Dominican Republic. Nevertheless, the Dominican Republic and the United States concluded talks and signed a trade deal in 2004 [1]. The Dominican Republic joined the trend of increasing regional and bilateral deals, especially since talks at the World Trade Organization (WTO) level and hemispheric-wide talks for a Free Trade Area of the Americas (FTAA) were fragile surrounding the matter of agriculture [2], [3]. Both talks collapsed in 2005 and have yet to be revived and concluded [2], [3].

While U.S. and Dominican producers are faced with competing under a reciprocal trade regime, which refers to trade deals that have been negotiated by all member countries and are supposed to be mutually beneficial, existing models pay

minimal attention to the link between trade rules and specific market competitiveness. The study explores the role of the U.S.-Dominican Republic-Central American Free Trade Agreement (DR-CAFTA) rules in allowing for specific U.S. agricultural commodities to compete in the Dominican Republic and vice-versa. The study also looks at business associations, particularly from developing economies, in this case, the Dominican Republic, in shaping trade rules during asymmetrical negotiations with larger, developed economies.

II. DEFINING COMPETITIVENESS

It is first important to clarify what competitiveness means. The term *competitiveness* is used regularly by researchers, trade theorists, economists, the business community, and policymakers when discussing the global economy. However, there lacks consensus on what the term means [4]-[6]. As a result, studies do not agree on exactly how to measure competitiveness and vary on their particular level of analysis—country, industry, or firm.

Corporations measure their ability to compete by its bottom line and maintaining a strong market performance, without which they would no longer exist [4]. At the national level, “competitiveness is elusive,” because countries continue to exist regardless of economic performance [4]. “The true definition of competitiveness is the ability of a region to export more in value added terms than it imports” [6].

Industry competitiveness refers to its ability to innovate and is measured by its global export performance [7]. Competitiveness does not occur “in a single moment; competitiveness emerges and develops consistently in a positive or negative way” [5]. In the case of the U.S. and Dominican agricultural sectors, it will be important to look at the competitiveness of the sector in each country and in each other's markets over a period of time. Furthermore, the current trends may be able to offer insight into future competitiveness capabilities.

This study was funded by the Fulbright Scholar Award (Dominican Republic).

Sarita D. Jackson, Ph.D. is with the Global Research Institute of International Trade, Los Angeles, CA 90064 USA (e-mail: sarita@griit.org).

III. DETERMINING INDUSTRY COMPETITIVENESS

Industry competitiveness is determined by its ability to innovate [8] [9], the existence of a competitive environment created by the government [8], investment in infrastructure, education and training [7], technological progress [8]-[10], macroeconomic stability, good governance, market efficiency, and institutions [10]. Institution refers to “the legal and administrative framework within which individuals, firms, and governments interact to generate wealth” [10].

Economist and researcher Michael Porter’s work has been highly influential both in the academic and practical arena when discussing industry-level competitiveness. However, it has not gone without its share of criticism. For instance, researcher Jahir Lombana maintains that the diamond model for competitiveness has limited applicability when applied to developing countries [5]. For instance, the model discusses developing human capital, providing top quality products and services, and the government creating an environment to allow local producers to become more competitive. Yet, in a number of developing countries, the model serves as information rather than a solution, considering many of the countries differ in their capacity and the structures required to adequately develop the resources and strategies needed to compete. Also, while many developing countries may be able to produce a substantial amount of a product, such as fish or meat, the differences in standards and equipment to adequately test food remain, thus limiting their ability to compete in markets with certain requirements, such as the United States and the European Union. Furthermore, the model is limited to the domestic context without taking into account the exogenous factors within the global economy that may also shape industry competitiveness. Exogenous factors may include multinational enterprises, because they contribute the tools necessary, such as the development of knowledge, for localized and trans-border clusters to enhance themselves and compete [11]. To be fair, Porter briefly discusses developing countries with different types of economies, such as planned economies, and the role of domestic firms versus foreign multinational companies in the early stages of economic development [8].

Regarding the role of government, “companies crossing borders become less dependent on a nation-state and need to be strategically located to take advantage of their environment and in some cases create them” [5]. In other words, multinational companies do not rely solely on the environment created by local government policy but that created at the international level. As a result, more recent studies have shifted toward understanding the competitive environment and impact on industry competitiveness in developing countries.

Other studies look beyond the macro and micro-level factors that determine competitiveness, which have been labeled as the meso-level of analysis [5]. The particular level of analysis examines sector-specific policies. Lombana advances upon the commonly accepted Porter model of competitiveness. “The external sector is included as an analytical separation between internal determinants of the domestic field and external

determinants of the international field,” according to Lombana [5]. In his examination of the factors that determine regional competitiveness, project manager at the Institute of Forecasting and Macroeconomic Research Sharofiddin Nazarov finds that the “interaction and interdependent chain of ‘object environmental,’ ‘process,’ and ‘project’ elements” are key [12].

In the case of U.S.-Dominican agricultural trade, international policy institutions vis-à-vis trade deals have reached the forefront of discussions on competitiveness. For instance, executive vice-president of the Dominican Agrobusiness Board (JAD – Junta Agroempresarial Dominicana, Inc.) Osmar Benitez expressed in a 2010 personal interview in Santo Domingo, Dominican Republic that because the sensitive sectors are harmed by the reduction of the Dominican Republic’s tariffs,¹ “we need to renegotiate the agreement [DR-CAFTA].” (Mr. Benitez also served as the negotiator for the agricultural sector during the trade talks between the United States and the Dominican Republic.) Those sensitive sectors include milk, rice, and poultry. In September 2016, Dominican producers also asked to renegotiate DR-CAFTA to enhance their competitiveness [13]. Perhaps, this signals the need to look beyond domestic factors and individual firm strategies toward international level institutions and rules.

IV. A COMPLEMENTARY APPROACH TO INDUSTRY COMPETITIVENESS

The proposed approach builds off of the institutional school of thought and narrows the focus to trade rules.

Within the last 16 years, an increasing number of countries have signed and implemented bilateral, regional, and cross-regional trade agreements. These trade deals establish formal binding rules that shape import/export behavior by allowing special access to specific markets. As a result, these trade rules increase the opportunities to compete in these same markets. The findings presented here do not intend to reduce the importance of costs, technology, and strategy in the competitiveness equation. Rather, the purpose is to add another significant layer. For instance, the U.S. textile industry may be less cost-competitive in the global market but represents most imports for apparel producers in countries, such as the Dominican Republic, even though less expensive alternatives from Asia exist [15]. The rules governing textile and apparel trade between the United States, Central America, and the Dominican Republic create an incentive for Latin American and Caribbean apparel manufacturers to utilize U.S. textiles to gain duty-free access to the U.S. market. As a result, Latin American and Caribbean apparel became more competitive in the U.S. market as import duties on their clothing exports were eliminated.

Trade rules also impact agricultural competitiveness in international markets. In certain sub-sectors, the United States represents a large share of Dominican food imports, whereas the Dominican Republic has shown tremendous export growth to the United States.

¹ Tariff and duty are used interchangeably throughout this piece.

The study complements existing work on industry competitiveness by emphasizing determining factors beyond that of the market economy and firm business strategies, more specifically the rules within reciprocal trade deals and unilateral trade programs. Furthermore, this study underscores competitiveness in specific markets rather than the global market as a whole.

V. METHODOLOGY

The unit of analysis in this study is the industry, specifically agriculture. The study explores how the agricultural industry can compete in specific markets and finds that trade rules also affect the capacity for an industry to do so. Competitiveness is determined by one country's share of total imports of a particular product by another country.

Agriculture has been selected as the specific industry because of its economic importance for many countries around the world. In the Dominican Republic, agriculture's share of total exports reached as high as 76% throughout the 1960s and 1970s. By the mid-1980s, that share fell to 55% [16]. By 2014, agriculture only accounted for 6.21% of the Dominican Republic's GDP, according to World Bank figures. (Industry represents 26.9% of the GDP and services, 66.9%.) Nevertheless, agriculture represented the economy's largest employer until the first part of the 21st century. Currently, agriculture accounts for 14.4% of the labor force, just behind 21% for industry [17]. Service sector jobs now provide more employment due to the expansion of construction, tourism, and free trade zones.

Qualitative research methods have been used to identify another determinant of industry competitiveness. The final argument is the result of examining the process leading up to the observable outcomes. The process includes the rules established under the unilateral 1983 Caribbean Basin Economic Recovery Act (CBERA), which allows eligible countries throughout Central America and the Caribbean to export particular goods to the U.S. market free of duties, and the reciprocal 2004 DR-CAFTA,² in which goods from the participating Central American countries, the Dominican Republic, and the United States can enter each other's market duty-free. The pattern established is worth identifying as a way of also offering some insight into what to expect after 2020, when nearly all tariffs on agricultural products are removed. The use of a single case and causal process tracing allows us to incorporate the complex and "dense web of relationships connecting states, companies, civil society organizations, and individuals as a policymaking system as well as analysis of their mutual influences" [18]. In other words, this research design, not only explains why certain outcomes occur but how various factors lead to these same outcomes. The government negotiators, agricultural producers, and business associations are incorporated into the analysis in order to comprehend the various factors promoting or hindering industry competitiveness in a specific market.

² The Central American members of DR-CAFTA include Guatemala, Honduras, El Salvador, Nicaragua, and Costa Rica.

Three goals of causal process tracing have been identified in recent literature—case-centric, theory-centric, and theory-building [18]. The fact that the DR-CAFTA process is still unfolding leads to difficulties in applying a strong theory-centric and theory-building approach to this analysis. For this reason, the study relies on the case-centric approach to causal process tracing, which is a "detailed narrative that explains how a particular outcome or set of events came about" and can be used to explain outcomes in a specific case [18]. For instance, the study explores international trade rules to test the theory that these same rules shape the ability for industries to compete in a specific market. However, following DR-CAFTA toward the end of the implementation stage may offer clues into its role in setting a particular pattern in motion in U.S.-Dominican agricultural trade.

The case-centric approach allows for generalizations among comparable cases. The study is limited at the same time, because the detailed historical narrative is based on recent history, of which a portion is still developing. In addition, the study begins a discussion as to the impact of domestic access and influence, albeit not static, by different sub-sectors within agriculture on the trade rules, which, in turn, shapes the capacity to compete.

VI. U.S.-DOMINICAN REPUBLIC TRADE IN AGRICULTURE AND SPECIFIC MARKET COMPETITIVENESS

This section highlights the trade trends in the specific industries that are the focus of this paper—coffee (traditional export) and dairy, poultry, and rice (domestic-market oriented and sensitive). The trends show the growth or decline of the share of the import market for each country to illustrate the degree to which these products are competitive in each other's market.

A. Coffee

Dominican coffee is among the traditional export sectors, in which processors sell the coffee beans to the export market. Much of the coffee is produced on small farms, usually less than eight acres, which are dispersed throughout the Northern and Central mountainous regions of the country. Most Dominican coffee goes to the United States, as well as Japan and the U.S. territory of Puerto Rico. Furthermore, although the CBERA regime encouraged non-traditional exports, coffee remains the most consumed beverage in the United States.

Under CBERA, Dominican coffee exports reached US\$34 million in 1991 and peaked at US\$49 million in 1995 before dropping down to US\$13 million in 1999.

Dominican coffee exports to the United States climbed over 2,000 percent from US\$324,042 in 2004 to US\$7,609,456 in 2011, according to data collected from the United Nations Commodities Trade (UN Comtrade) database. Furthermore, Dominican coffee exports increased 27 percent from 2007, the same year that DR-CAFTA took effect in the Dominican Republic, to 2011.³

³ Figures from 2012-2015 are not included, because they incorporate coffee, tea, mates and spices combined.

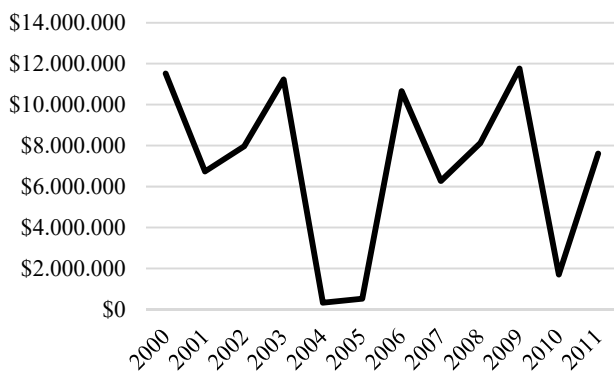


Fig. 1 Dominican coffee exports to the United States (2000-2011) (US\$)

Despite the sharp spikes in Dominican coffee exports to the United States, they continue to account for less than one percent of the U.S. coffee import market. Compared to other upper middle income countries in 2011, Dominican coffee appears uncompetitive in terms of its share of the U.S. market at only 0.17%. The Dominican Republic only exported US\$7.6 million out of a total of US\$4.6 billion of U.S. imports from these countries, resulting in the former ranking among the top 10 upper middle income coffee exporters to the United States.

As with Dominican coffee to the United States, U.S. coffee exports to the Dominican Republic have shown a capacity to increase in value. U.S. coffee exports jumped from only US\$59,842 in 2000 to US\$291,940 in 2003 to US\$172,636 in 2011. At the same time, U.S. exports represent an insignificant share of only two percent of Dominican imports of coffee from the world. U.S. coffee exports, when compared to other high-income economies, reached 27% of the Dominican coffee import market from these same economies in 2011.

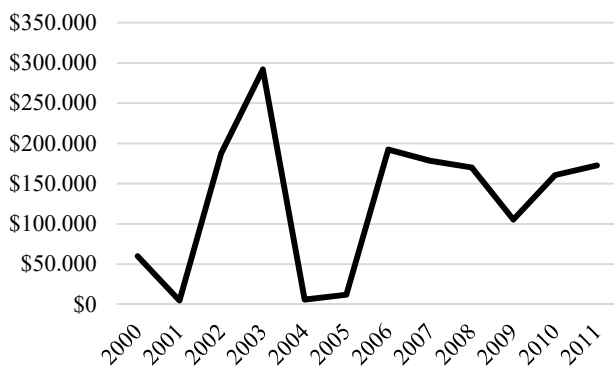


Fig. 2 U.S. coffee exports to the Dominican Republic (2000-2011) (US\$)

Overall, the Dominican Republic has seen growth under CBERA until the mid-1990s. Coffee still received duty free access on a Most-Favoured Nation (MFN) status [19]. MFN status refers to the tariff rates placed on imports from other WTO members equally. Although, CBERA allowed for coffee from eligible countries to enter the U.S. market duty-free, the

United States also removed duties on coffee imports from WTO members. Therefore, the benefits of duty-free access for Dominican coffee to the U.S. market under CBERA was limited by the same duty-free access that was offered to WTO members. The same limits of the duty-free access were evident under the DR-CAFTA, because Dominican producers still had to compete against coffee exporters from the Central American members of the trade deal. The limitation of the special access under CBERA and DR-CAFTA may partially explain why the Dominican coffee still holds an insignificant share of the U.S. coffee market.

The story is the same for U.S. coffee exports to the Dominican Republic under DR-CAFTA. In other words, U.S. coffee exports have increased in value but their share of the Dominican coffee import market remains low. U.S. coffee exports under CBERA are not taken into account, since the program only provided preferential access to Caribbean Basin producers to the U.S. market. As traditional agricultural sectors face an increasingly liberal market under DR-CAFTA, the study reveals the trade deal's role in enhancing or hindering competitiveness for U.S. and Dominican agricultural producers in each other's market.

B. Dairy

Dominican dairy exports to the United States have seen a huge increase from only US\$130,568 in 2000 to US\$4 million in 2015. Although there were increases and decreases from 2000 to 2005, while still under CBERA during the early part of this period, Dominican dairy exports began a steady climb from 2005 to 2015, following the signing of DR-CAFTA. The greatest jump was from 2008 and 2009.

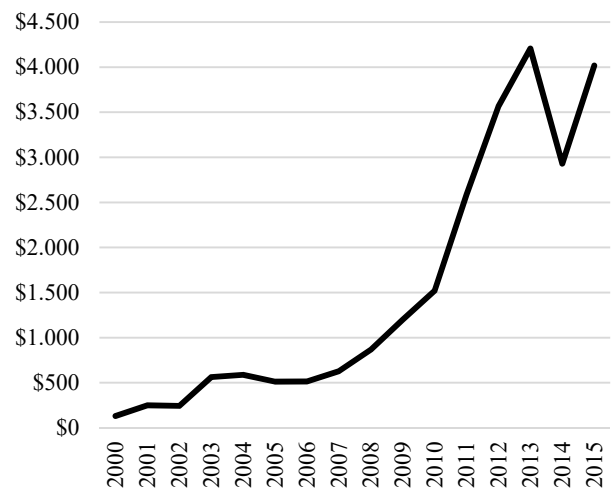


Fig. 3 Dominican dairy exports to the United States (2000-2015) (US\$ million)

When compared to other upper middle income countries, the Dominican Republic ranked number seven following Jamaica and ahead of Colombia with 1.94% of U.S. imports from these countries. On the other hand, the U.S. dairy industry has increased its exports to the Dominican market. From 2000 to 2015, U.S. dairy exports to the Dominican Republic jumped

387% from US\$12 million to US\$59 million worth of exports. From 2007 to 2008 alone, U.S. dairy exports to the Dominican Republic doubled.

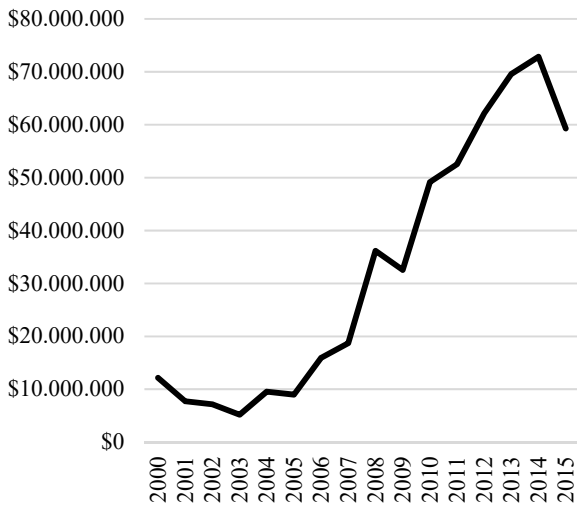


Fig. 4 US dairy exports to the Dominican Republic (2000-2015) (US\$)

Compared to other high-income economies, the United States represents an 87% share of Dominican dairy imports, thus demonstrating its ability to compete in this category.

C. Poultry

Dominican poultry exports to the United States are quite minimal, yet showed a sharp increase from 2005 to 2010 before declining rapidly again from 2010 to 2014. Even with the increase, Dominican poultry to the United States remains uncompetitive in the U.S. market, accounting for zero percent of total U.S. poultry imports.

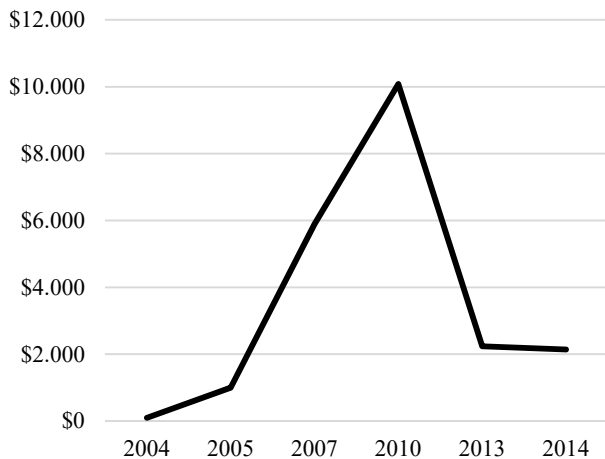


Fig. 5 Dominican Poultry Exports to the United States (2004-2007, 2010, 2013, 2014) (US\$)

Upper middle-income economies, as a whole, also do not represent a significant percentage of U.S. poultry imports. How

the Dominican poultry industry will fare both domestically and in the U.S. market following the full implementation of DR-CAFTA remains to be seen.

U.S. poultry exports to the Dominican Republic, on the other hand, reached its peak in 2011 with a value of US\$3.5 million worth of exports. That was a 33% jump from US\$2.6 million in 2000.

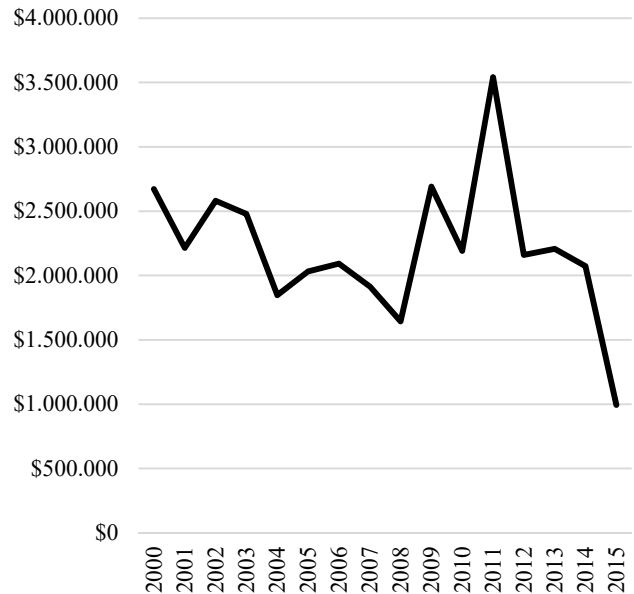


Fig. 6 U.S. Poultry Exports to the Dominican Republic (2000-2015) (US\$)

U.S. poultry has proven its ability to compete in the Dominican market. U.S. poultry has represented a majority of total Dominican poultry imports from the world since 2000. In 2012, that figure reached 95%.

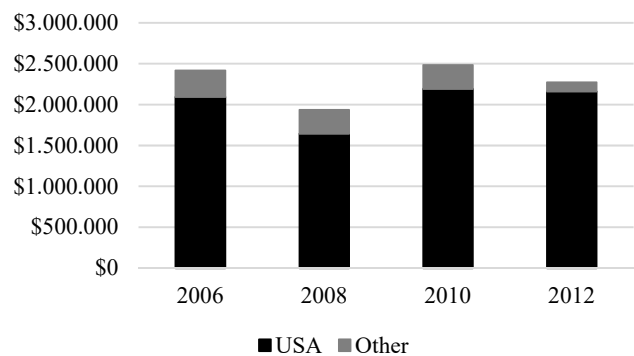


Fig. 7 U.S. Share of Dominican Poultry Imports (2006, 2008, 2010, 2012) (US\$)

U.S. poultry share of Dominican poultry imports continues to remain at more than 90%.

D. Rice

Dominican rice exports to the United States, increased dramatically from only US\$2 in 2004 to US\$13,000 worth in

2014. Despite the huge increase, Dominican rice remains uncompetitive at zero percent in the U.S. market when compared to both upper middle income economies and the world.

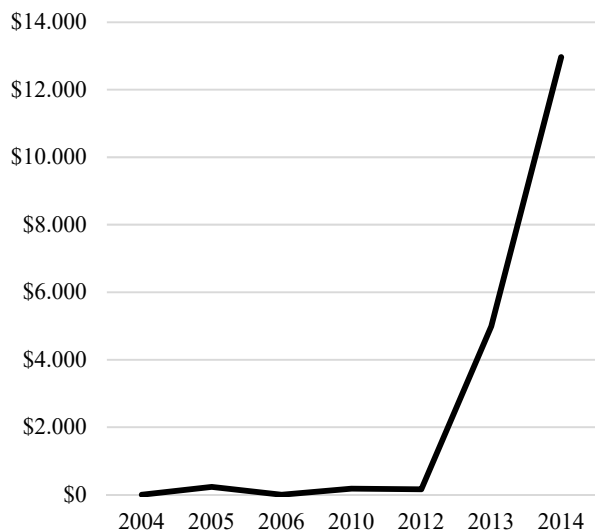


Fig. 8 Dominican rice exports to the United States (2004-2006, 2010, 2012-2014) (US\$)

U.S. rice exports to the Dominican Republic showed a sharp upturn in 2004 when it peaked at about US\$36 million, up from just US\$2.6 million a year earlier. However, U.S. rice exports continued to tumble downward after that. As a matter of fact, unlike with the other commodities, U.S. exports dropped 45% from 2000 to 2015. The United States is the number one exporter to the Dominican market, according to UN Comtrade statistics.

In terms of market share, the United States has proven to remain quite competitive with a share ranging from about 60% in 2003 to 99% in 2013. That is a large jump from only about 18% in 2001.

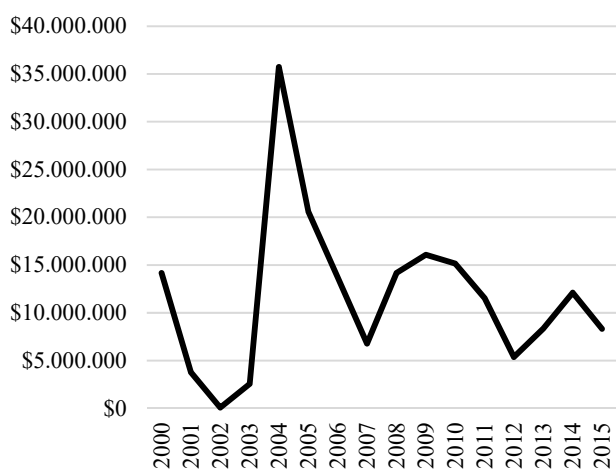


Fig. 9 U.S. rice exports to the Dominican Republic (2000-2015) (US\$)

In sum, Dominican export-oriented coffee is still not competitive in the U.S. market, even under DR-CAFTA. The combination of trade policy and increased competition for an already vulnerable sector and weak negotiation power at the domestic level makes it difficult for the industry to gain. On the other hand, the other commodities highlighted in this section has enjoyed high levels of influence at the domestic level. Furthermore, DR-CAFTA presents opportunities to grow in the U.S. market due to the anticipated duty-free access. Simultaneously, the heavy competition from producers from all around the world may make the rules less advantageous to boosting their competitiveness in the U.S. market. On the other hand, the rules appear to enhance the competitive advantage of US producers in the Dominican market. The next section explores how the rules governing U.S.-Dominican agriculture trade affect exporters to each other's market and the role of bargaining power on what was placed on the table and the final outcome.

VII. TRADE RULES

Domestic government policies such as export subsidies influence the ability for domestic firms to “expand market shares in profitable areas” [14]. International level trade policies shape the decisions of importers to purchase goods from select markets, although less expensive alternatives exist [15]. Consequently, exporting industries will enjoy increased preferential access, which has the possibility of becoming competitive in that market.

Within the agricultural provisions, coffee, an export-oriented industry, has different rules than the more domestic-oriented industries—dairy, poultry and rice—that now have to shift toward a bilateral trade regime.

In addition to the international level rules between the United States and the Dominican Republic, domestic trade practices also impact the competitiveness of foreign goods in the same domestic market. (The United States only placed duties on coffee substitutes, containing coffee.) With DR-CAFTA, those duties were removed and thus, exports increased. However, other U.S. trade practices, specifically non-tariff barriers such as sanitary and phytosanitary restrictions, limited the effectiveness of CBERA for Dominican coffee in that market.

TABLE I
 AGRICULTURAL COMPETITIVENESS IN A RECIPROCAL TRADE REGIME (%)
 (YEAR)

Item	Dominican Republic in the United States	United States in the Dominican Republic
Coffee	0.17 (2011)	27 (2011)
Dairy	1.94 (2015)	87 (2015)
Poultry	0 (2014)	95 (2012)*
Rice	0 (2014)	98 (2015)

Note: Share of comparable economies.
 * Share of total imports from the world.

Prior to DR-CAFTA, the Dominican Republic restricted trade through duties. For instance, the Caribbean country imposed bound tariffs as high as 40% on agricultural imports by the mid-1990s. Bound tariffs are the rates imposed by

individual members within the WTO on specific commodities. By 2002, the average applied tariff rates on agricultural products reached 12.9%. Tariffs on products surpassing the quotas, which are restrictions on the volume entering the Dominican Republic, reached 118% for chicken and 107% for rice by 2002.

The highest U.S. tariffs apply mainly to agricultural products. Tariff rate quotas apply to the import of beef, dairy products, sugar, peanuts, tobacco and cotton. Out-of-quota tariffs reached up to 350% in 2001.

The DR-CAFTA serves as a shift from the unilateral trade regime under CBERA toward a regime in which member countries have preferential access to each other's market, which, in turn, offers some sort of competitive edge. However, as research shows, the pattern for Dominican producers in the U.S. market remains the same from one regime to the other, whereas U.S. agricultural exports to the Dominican Republic actually demonstrate an ability to compete.

A. Coffee

DR-CAFTA eliminated tariffs on coffee traded between the member countries as soon as it took effect. Prior to the start of talks between the United States and the Dominican Republic, Dominican import tariffs on coffee reached as high as 20 percent. During this same period, U.S. tariffs on coffee imports were already at zero percent at the WTO level and through CBERA. While CBERA offered Dominican, as well as other Caribbean and Central American coffee, preferential access, the benefits were minimal considering that producers from other WTO member countries also enjoyed duty-free access to the U.S. coffee market.

The increase in Dominican coffee exports to the United States under DR-CAFTA continued to follow a path that had already been set by CBERA—duty-free access. Dominican and U.S. now have duty-free access to each other's market. This duty-free access under DR-CAFTA is one contributing factor to the sharp increase in U.S. coffee exports to the Dominican Republic. Notably, U.S. coffee exports to the Dominican Republic were more competitive in 2001 with a share of the latter's total imports from the world of 64% compared to only 2% in 2011. Time will only tell if the DR-CAFTA will set a path to restore U.S. coffee competitiveness in the Dominican Republic. On the other hand, the on-going tariff free access to the U.S. market helped Dominican coffee exports to increase but not in terms of market share. An already vulnerable industry has not been able to compete against other suppliers to the U.S. market from comparable economies and from around the globe in general. The question becomes how to create trade deals that set a path that actually allow for competition in the 21st century, especially for traditional export sectors such as coffee.

The rules for the sensitive products that are domestic-oriented in the Dominican Republic allow for protection for a period of time that ranges from 10-20 years. The analysis of trade rules presented here focuses on how the DR-CAFTA rules set a path that may help or hinder competitiveness for these industries upon the complete opening of U.S.-Dominican agricultural trade.

B. Dairy

The duty rates on Dominican milk will be phased out over a 10 to 20 year period. More specifically, powdered milk tariffs will be eliminated to zero within a 20 year time frame. Liquid milk received 10 years of protection. Tariffs and quotas on liquid milk were eliminated on January 1, 2015.

According to the U.S. Department of Agriculture (USDA), the United States remains the top supplier of non-fat dried milk (NFDM) to the Dominican Republic. As a matter of fact, in 2014, the United States accounted for 89% of total Dominican NFDM imports from the world both in volume and value. The volume of Dominican NFDM imports from the United States increased from under 2,000 metric tons in 2007 to more than 8,000 metric tons in 2014. U.S. share of Dominican liquid imports from the world increased by 2014 yet only represented a 9.7% share of the market, according to the USDA. U.S. share of powdered milk imports from the world by the Dominican Republic also saw an increase following the implementation of DR-CAFTA, whereas the top supplier of powdered milk to the Dominican Republic, Denmark, experienced a decrease in its market share.

Dominican dairy exports to the United States increased since DR-CAFTA took effect. However, its exports still remain small. According to the USDA, cheese and margarine represent the top two dairy products that are formally exported, and 99% of those exports go to the United States. From 2007 to 2014, cheese exports increased 31% in terms of volume and 59% dollar value.

Under DR-CAFTA, tariffs and quotas on fresh cheese, cottage cheese, molten cheese and soft cheese were also eliminated on January 1, 2015. Tariffs and quotas on cheddar cheese will be completely removed in 2020 and mozzarella cheese, 2025.

C. Poultry

Dominican tariffs on poultry, particularly chicken leg quarters, will also be eliminated within a 20-year period and sooner for some poultry products, as in the case of other poultry that are not chicken leg quarters. These items face a 10 year tariff elimination, which means that they were eliminated in 2015. U.S. tariffs on Dominican poultry imports remain at zero as a result of CBERA. Even with this information, there is not any data because the Dominican poultry industry is not an export-oriented industry. Nevertheless, the current trade regime under DR-CAFTA forces poultry producers to develop strategies to compete internationally. On the other hand, U.S. poultry exports to the Dominican Republic actually accounted for 93% of the latter's imports from the world in 2014, a slight drop from 97% in 2005.

Overall, the trade rules established under CBERA and DR-CAFTA have allowed for increased access for Dominican producers in the U.S. market and vice-versa. Yet, when examined in terms of competitiveness, Dominican producers rank quite low in the U.S. market. A number of internal and external factors limit the ability of Dominican producers to benefit from the competitive advantage offered by trade

programs and trade deals whereas U.S. producers are able to do so.

D.Rice

Lastly, in the case of U.S.-Dominican rice trade, DR-CAFTA allows for tariffs to remain at current levels for 10 years. Beginning the 11th year, tariffs will be phased out until their complete elimination by the 20th year. There was a concern about the influx from the United States. Oxfam estimated that the DR-CAFTA would prove harmful for Dominican rice producers and result in the loss of a main source of financing [20]. The same organization estimates that by the end of the transition period, the loss of fiscal revenues would increase from 0.73% to 0.78% of GDP [20]. Unless rice producers develop an effective export strategy that will allow them to take advantage of DR-CAFTA and compete both at home and in the U.S. market, the trade deal will prove anything but beneficial.

Current trade trends already show the benefit of DR-CAFTA to U.S. rice producers in the Dominican market. The U.S. share of the Dominican rice market increased from only 18% in 2000 to 98% in 2015. U.S. domination of this market will more than likely continue, especially when tariffs are eliminated altogether within the next decade.

VIII. INDUSTRY ASSOCIATIONS AND TRADE RULE INFLUENCE

The Dominican agricultural sector played an active role in the trade negotiations from the side room, known as the *cuarto de al lado* in Spanish, between the United States and the Dominican Republic, despite opposition to a trade deal in the beginning. This section just shows how the Dominican agricultural producers had access to the rule-setting process and influenced the negotiating agenda.

In the case of the association representing Dominican coffee producers, National Union of Coffee Producers of the North (UNACAFEN – Union de Asociaciones de Caficultores del Norte). UNACAFEN had access to but not much influence on the proposals put forth at the bargaining table.

During the negotiation process, only one individual from UNACAFEN participated in the first round in Santo Domingo, Dominican Republic and traveled to Washington, D.C. for the last round of the DR-CAFTA negotiations. Leo Valverde, the head of UNACAFEN, was the only person who represented the coffee interests during the negotiations. “During the rounds, we already had some information but not the capacity to make demands,” said the president of the Dominican Coffee Confederation (CONCAFED – Confederación Cafetalera Dominicana) Rufino Herrera Puello in a June 2010 personal interview in the Dominican Republic. Other representatives from the regional coffee associations attended government-coordinated seminars about DR-CAFTA but had little input. Instead, as the same coffee association representative described it, during the meetings leading up to DR-CAFTA, the government basically informed them of the benefits of DR-CAFTA and moved forward with the negotiations. Yet, documents for meetings such as that on Jan. 30, 2004 indicate that representatives from JAD, which represents all agrobusinesses, addressed issues pertaining to coffee.

Unfortunately, the industry did not have a clearly defined position during the three rounds of the DR-CAFTA negotiations. Coffee producers expressed concerns about low productivity and increased competition from the Central American producers. However, these concerns were raised well after the negotiations had concluded. As a result, it was much easier for the Dominican Republic to move forward with its proposals with minimal consideration of the preferences and proposals by the coffee sector. The Dominican negotiators agreed to allow for immediate market opening for non-roasted coffee and a tariff rate quota reduction schedule of 15 years until January 1, 2020 for roasted coffee.

The National Council for the Regulation and Development of Dairy Industry (CONALECHE – Consejo Nacional para la Reglamentación y Fomento de la Industria Lechera), an association created by government decree in 2001, actively represented the interests of the milk producers. Dominican milk producers were concerned about their inability to compete against U.S. imports that benefited from U.S. subsidies and advanced technology, according to Diego Blanco from Nestlé Dominicana during a May 2010 personal interview in Santo Domingo, Dominican Republic. CONALECHE members consulted regularly with the government negotiators and presented clear goals, which the latter put forth at the negotiating table. For instance, CONALECHE played a role in shaping the state’s proposal establishing a quota system for dairy imports such as milk and cheese. According to records obtained in the Dominican Republic, CONALECHE met with the agricultural negotiating team on January 30, 2004 and proposed a base quantity of 230 metric tons of liquid milk entering the Dominican Republic and the highest level of protection possible. The government negotiators stated publicly that one of its objectives was to obtain “the major level of protection possible for...milk” because it was one of the Dominican Republic’s 10 sensitive products. This goal was reflected in the government negotiators’ proposal of a 6.66% annual reduction on the import of liquid milk from the United States over a 15 year period until Jan. 1, 2020. In the case of CONALECHE and the Dominican government negotiation team, the outcome of the DR-CAFTA shows success in achieving the aforementioned objective for powdered milk but fell short for liquid milk. Powdered milk received 20 years of protection whereas liquid milk, only 10.

The National Council of Poultry Production (CONAPROPE – Consejo Nacional de Producción Pecuaria) was also very instrumental in presenting the interests of the Dominican poultry producers to the government negotiators. CONAPROPE was created by government decree no. 351-82 on Oct. 16, 1982 to work with the state in the formation, conduction and execution of policies for the benefit of the poultry sector. Following the critique of the negotiations, the government negotiating team invited poultry producers to a working meeting, scheduled for Jan. 23, 2004, leading up to the second round of negotiations. In an interview with the Dominican newspaper *Listín Diario*, CONAPROPE president Francisco Leonis Fernández mentioned that the producers backed the government negotiators [21]. At the same time, the

association asked that the negotiating team defend the positions that were agreed upon during meetings leading up to the first round of negotiations. The producers asked for a tariff reduction schedule of 10 to 20 years for poultry, which is what the negotiating team put forward. In the end, the producers and negotiators received what they wanted—a protection period of 20 years.

Finally, the Dominican Association of Rice Producers (ADOFA – Asociación Dominicana de Factorías de Arroz) demonstrated significant access and influence on the proposals that the negotiating team put forward. ADOFA originally sought 20 years of tariff reduction, which the Dominican Republic put forward. The United States wanted 15 years, but in the end the deal included 20 years of protection for the Dominican rice producers.

In the end, the producers for the sensitive industries got what they wanted because of their long history of political access and influence and capacity to provide the information required to support their desired positions. However, the final rules may not be truly beneficial. Rather, the final agreement is “like a time bomb,” as described by U.S. Agency for International Development (USAID) economic policy coordinator Luis González in a February 2010 personal interview. He went further to say that in those 20 years, the government will have to help producers to adapt to compete to avoid a collapse of the industry. The Dominican agriculture sector’s experience with the U.S. market in a reciprocal trade regime offers lessons for the same industries in the comparable economy of Cuba.

IX. RECOMMENDATIONS FOR CUBA

Cuba’s agricultural sector is comparable with that of the Dominican Republic in a number of ways. The sector represents a small portion of the GDP of only four percent [22]. However, the sector employs 20 percent of the working population [22]. Similar to the Dominican Republic, Cuba is an upper middle-income country. Its GDP reached US\$77.15 billion in 2013 (latest reported data) compared to the Dominican Republic’s US\$67.1 billion in 2015, per World Bank figures. Some of the main agricultural commodities include coffee, rice, sugar and citrus and tropic fruits, similar to the Dominican Republic. Whereas the USAID is encouraging organic production in the Dominican Republic, “Cuba is a global leader in the production of organic agriculture” [22].

Because agricultural production has declined tremendously, Cuba imports about 80% of its food, which amounts to roughly US\$1.5 billion per year [22]. For years, the United States remained the largest supplier of food to Cuba, which is allowed under the 2000 Trade Sanctions Reform and Export Enhancement Act. In recent years, U.S. share of the Cuban market has declined due to increased competition from other global suppliers. As a matter of fact, U.S. food suppliers’ share of the Cuban market dropped to third place behind the European Union and Brazil in 2015. Nevertheless, new opportunities exist with the restoration of diplomatic relations between the United States and Cuba and the easing of restrictions on U.S. trade with and travel to the island. A 2015 report by the USDA anticipates that political economic reforms would help U.S. agricultural

producers and exporters to compete in the market and meet the needs of Cuban consumers [23].

In addition to discussing the political and economic reforms in the two countries and their benefits to U.S. exporters, it is important to also think about how trade programs and, potentially, trade deals can also boost the competitiveness of producers in developing nations. Using the findings from the case of the Dominican Republic, the study includes suggestions for the Cuban agricultural sector to establish its presence as a competitor in the U.S. market when economic relations between the two countries are fully restored. Should Cuba and the United States enter into any form of trade talks, here are a few bargaining-related items for Cuba to consider:

- 1) Develop a national strategy for international-level trade negotiations prior to entering into trade talks.
- 2) Create room for semi-autonomous and/or autonomous private sector associations to represent the needs and interests of producers.
- 3) Enhance the organizational and informational capacity of the agricultural sector.
- 4) Establish the capacity for both government and business associations to bargain successfully during trade talks.
- 5) Promote financing for resources necessary to actively and effectively participate in trade negotiations.

X. CONCLUSION

In sum, trade rules can either help or hinder the capacity to compete, as evident by the unilateral and reciprocal trade rules governing U.S.-Dominican agricultural trade. The study is limited by the fact that data showing the trends in U.S.-Dominican agricultural trade before the 1990s is not available via UN Comtrade and other alternative databases. Secondly, DR-CAFTA has yet to be fully implemented, which makes it difficult to adequately explore this shift and the resulting pattern that emerges in terms of competing in each other’s market.

Future research would strengthen the findings presented here in several ways. An extension of this study to offer a more in-depth historical overview and clearer pattern set by CBERA and DR-CAFTA would include more cases, which would be the countries throughout Central America. Furthermore, a thorough analysis of the role of the industry associations in setting the agenda to determine the rules that impact their ability to compete would offer greater insight into what determines business association access and influence, which is beyond the scope of the work presented here. Aligning with the research design, future work would also incorporate other factors that shape competitiveness of sensitive agricultural industries under the new trade regime. Some of those factors include domestic policies over time and political leverage from a historical perspective.

To enhance recommendations for Cuba, future research would also identify the current structure of business-state relations in Cuba, especially as the Cuban economy gradually opens, to offer greater useful, practical and feasible recommendations for potential future trade talks. Nevertheless, the argument presented in this study advances scholarly discussions surrounding competing in a global economy by

turning our attention to the rules that govern international trade between specific markets. This information is especially useful for the sensitive agricultural industries as they shift from focusing mainly on local production toward export competitiveness. Furthermore, the study has practical implications for comparable economies, as in the case of Cuba, by suggesting ways in which a country can develop its international trade negotiating capacity in an effort to boost the competitiveness of its producers.

ACKNOWLEDGMENT

S. D. Jackson thanks all of the government officials, business representatives, and researchers who took the time out of their schedules to provide useful insight and the resources to complete this research project while in the Dominican Republic.

REFERENCES

- [1] A. M. Butcher, "U.S.-Central America-Dominican Republic Free Trade Agreement: Potential Economywide and Selected Sectoral Effects," *USITC Publication 3717*, pp. 1-139, Aug. 2004.
- [2] S. W. Hartman, "The WTO, the Doha Round Impasse, PTAs, and FTAs/RTAs," *The International Trade Journal*, vol. 27, pp. 411-430, 2013.
- [3] C. Brown, "Trade Integration and Institutional Reform in Latin America: Can the FTAA Be Revived?" *Law and Business Review of the Americas*, vol. 15, no. 1, pp. 221-248, 2009.
- [4] P. Krugman, "Competitiveness: A dangerous obsession," *Foreign Affairs*, vol. 73, no. 2, pp. 28-44, Mar. 1994.
- [5] J. Lombana, "Looking for a distinctive model with which to analyze competitiveness," *Advances in Competitiveness Research*, vol. 19, no. 3&4, pp. 32-44, 2011.
- [6] R. D. Atkinson, "Competitiveness, innovation and productivity: clearing up the confusion," *The Information Technology & Innovation Foundation*, pp. 1-7, Aug. 2013.
- [7] M. E. Porter, "The competitive advantage of nations," *Harvard Business Review*, vol. 68, no. 2, pp. 73-93, Mar.-Apr. 1990.
- [8] M.E. Porter, *The Competitive Advantage of Nations*. New York: Free Press, 1990.
- [9] "The relation between competition, competitiveness, and development," *United Nations Conference on Trade and Development*, pp. 1-21, May 2002. ("La relación entre la competencia, la competitividad y el desarrollo," *Conferencia de las Naciones Unidas sobre Comercio y Desarrollo*, pp. 1-21, mayo 2002.)
- [10] "Global competitiveness report 2014-2015," *World Economic Forum*, pp. 1-10.
- [11] A. M. Rugman and A. Verbeke, "Multinational enterprises and clusters: an organizing framework," *MIR: Management International Review*, vol. 43, no. 3, pp. 151-169, 2003.
- [12] S. Nazarov, "The systemic cognitive model of increasing the competitiveness of the region," *Perspectives of Innovations, Economics & Business*, vol. 11, no. 2, pp. 87-93, 2012.
- [13] "Dominican agro sector: Time to renegotiate DR-CAFTA free trade deal," *Dominican Today*, 29 Sept. 2016.
- [14] J. A. Brander and B. J. Spencer, "Export subsidies and international market share rivalry," *National Bureau of Economic Research Working Paper Series*, no. 1464, pp. 1-31, Sept. 1984.
- [15] S. Jackson, *It's Not Just the Economy, Stupid! Trade Competitiveness in the 21st Century*. Cambridge, UK: Cambridge Scholars Publishing, 2016.
- [16] D. Greene and T. Roe, "Trade, exchange rate, and agricultural pricing policies in the Dominican Republic," *World Bank Comparative Studies*, vol. 1, 1989, pp. 1-407.
- [17] "The World Factbook," *CIA*.
<https://www.cia.gov/library/publications/the-world-factbook/geos/dr.html> (accessed Sept. 2, 2016)
- [18] A. Kay and P. Baker, "What can causal process tracing offer to policy studies? A review of the literature," *Policy Studies Journal*, vol. 43, no. 1, 2015, pp. 1-22.
- [19] L. A. DiRicco, "Assessment of rules of origin under the Caribbean Basin Economic Recovery Act," *USITC Publication 2381*, pp. 1-78, May 1991.
- [20] C. Galián, "A raw deal for rice under DR-CAFTA: How the Free Trade Agreement threatens the livelihoods of Central American farmers," *Oxfam Briefing Paper*, pp. 1-56, Nov. 2004.
- [21] J. Severino, "Producers strengthen their position and pressure on the negotiators" ("Productores arrecian posición y presionan a los negociadores"), *Listin Diario*, 10 Jan. 2004.
- [22] "Cultivating Cuba's agricultural sector," *Cuba Business Report*, 1 Aug. 2016 <http://www.cubabusinessreport.com/cultivating-cubas-agricultural-sector/> (accessed Oct. 2, 2016)
- [23] "U.S. agricultural exports to Cuba have substantial room for growth," *International Agricultural Trade Report*, U.S. Department of Agriculture, June 22, 2015.