

"BANANA WAR" AND WORLD TRADE CHANGES

Jaime de Pablo Valenciano

Universidad de Almería, Edificio Departamental de Ciencias Económicas y Empresariales (Edif. B), Planta 1, Despacho 05, Spain. Tel: +34 950 015169,
E-mail: jdepablo@ual.es

Miguel Angel Giacinti Battistuzzi

Gabinete MAG, Argentina

Tomás García Azcaráte

European Commission and Solvay Business School of Economics and Management (SBSEM), Belgium

Abstract

The EU banana import regime has been controversial during years and years and it deserves to be looked at. This article aims to analyse the results of the negotiation process which ended the latent conflict (known as 'banana war'); it also compares the ex ante predictions and the ex post results. In order to better understand the significant differences, we look for the triple evolution: trade, prices and market structures. Since 2006, many stakeholders have gained power in the international market, in particular suppliers that quickly assimilated the necessity to adapt to market changes; the EU consumers took advantage of lower prices and the EU policy adaptation to WTO rules. This article is only a case study, but its conclusions can be helpful for analysing other trade conflicts or agreements.

Keywords: *Banana, business structure, EU foreign policy, international trade, management.*

1. Introduction

Before 1993, each European country pursued their own trade regimes (Guyomard & Le Mouel, 2003; Guyomard et al., 2006; Read, 2001). The Single European Market established in 1992 provided the impetus to eliminate internal UE border restrictions. The solution adopted in 1993 (Guyomard et al., 1997) consisted of a combination of two tariff-rate quotas/regimes and a minimum income guarantee to EU producers through direct payments up to 840,000 tonnes per year. The specific quota allowed the African, Caribbean and Pacific (ACP) producing countries (Belize, Cameroon, Cape Verde, Dominica, Grenada, Ivory Coast, Jamaica, Madagascar, Somalia, St. Lucia, St. Vincent and the Grenadines, and Suriname) to enter the EU market duty free up to a maximum volume of 857,700 tonnes per year. From 1993 to 1998, there were also country-specific allocations associated to this ACP quota. The initial annual quota for non-traditional ACP States (Dominican Republic and Ghana) and the Most Favoured Nation (MFN) countries (mainly Latin American) was set at 2 million tonnes for the EU-out of which 12 with an in-quota duty of EUR 100/ton. This general quota rose up progressively to 2.553 million tons from 1995 for the EU-15 with a reduced duty of EUR 75/ton.

As underlined by Spriegel (2000), "immediately after the EU (established) its new banana regime, many Latin America banana producing countries claimed that the EU's trade preferences to ACP countries violated GATT "free trade agreement principles". The US became involved in the dispute after being pushed by Chiquita (Kastele, 1998; Spriegel, 2000; Read, 2001; Gassama, 2002; Myers, 2004; Bucheli, 2005).

This article aims to explain the changes in the banana international trade market following the final agreement reached in Geneva that ended the 'banana war' between Europe and America (the US and the "Dollar Banana" producing countries). We aim to understand and explain first, the gap between theoretical "ex-ante" analysis and "ex-post" facts and second, the complexities and adjustments that happened in the banana international trade.

2. The Final Agreement and The Present EU Regime

The European management of the import regimes has always been in the case of fruit and vegetables, a balance between two conflicting objectives: to support internal producers and to preserve trade flows from preferred countries (Cioffi & dell'Aquila, 2004). For the main fruit and vegetables, the system used to be, and still is, the entry price (EU, 2008; Goetz & Grethe, 2009; Cardamone, 2011; Cioffi et al, 2011; Santeramo & Cioffi, 2012). As we have already explained in the introduction, since the beginning in 1992 of the European Common Market Organisation for bananas (ECMO), border protection was already organised in a complete different way and the difference increases even more from 2006.

Since 1 January 2006 the European Union applies a "Tariff-Only" import regime, with a tariff of 176 Euros per ton of bananas imported from third countries enjoying Most Favored Nation (MFN) status - mainly in Latin. On 15 December 2009, the European Commission signed a banana's agreement with Latin American Most Favoured Nations (MFN) and the United States. According to it, the EU was committed to cut the MFN banana import tariff in eight steps, from the initial €176/ton rate to €114/ton in 2017 (the earliest) or 2019 (the latest), being the biggest cut firstly, by 28 EUR/ton to EUR 148/ton, once all parties signed the deal. Since 1 January 2008, ACP banana suppliers, that began to negotiate an Economic Partnership Agreement (EPA), were benefited from duty and quota free access to the EU market (EU, 2014).

There have been large consensus in the ex-ante analysis of the consequences of the previous EU import regime and, therefore, the consequences of its removal were more opportunities for the Latin American countries exporting "dollar bananas" (Guyomard et al., 2003; Anania, 2009), a decreased competitiveness of ACP countries, and in particular the Caribbean States (Guyomard & Le Mouel, 2003; Myers 2004; Anania, 2010, 2011). As said by Agritrade (2010), it would be practically sounding the curfew for ACP banana exports, and higher volumes and lower prices for the EU consumers (Borrell, 1997; Read, 2001).

Only Read (2001) predicted a long-term profitability decrease for Chiquita and Dole in the EU marketplace, as the main victims of the quota rents' elimination.

3. Material and Methods

In our research, we used of a large number of databases: Comext and FAOSTAT (trade data); Eurostat and the Economic Research Service (ERS) of USDA (prices); ERS-USDA (currencies), in addition to several other sources such as customs data from Columbia and Ecuador; CSO/GFK (Italy); Fyffes/Trimetric (United kingdom); INSEE (France); Berichte. bmelv-Statistik (Germany) and MAMM (Spain).

The Herfindahl–Hirschman Index (HHI) that measures the level of concentration in a given industry is a well-known and commonly accepted one indicator of market competition. On the basis of European Union Commission guidelines and HHI values, the given industry can be characterized as unconcentrated, moderately concentrated or concentrated (Brezina et al, 2014).

$$HHI = \sum_{i=1}^n \left(\frac{X_i}{X} 100 \right)^2$$

Where: Herfindahl-Hirschman Index; HHI , $\frac{X_i}{X}$ Participation of the i -th company in the market; n number of firms in the industry or cluster. Possible outcomes go from 0 to 10.000, this index reading based on United States regulations is performed according to the following table:

$HHI < 1000$ = low concentration level.
 $1000 < HHI < 2000$ = moderate concentration level
 $HHI > 2000$ = high concentration level

The objective of this methodology is to determine the degree of concentration of the banana sector by country, and it is effective methodology when disaggregated data on foreign trade is available, as is the case here. The Theory has established that this index is appropriate in cases of firms of similar sizes, However, in the other circumstances, such index gives results opposite to those suggested by industrial organization theory (García Alba, 1994).

The significance of the HHI approach can be appreciated by the number of articles that use it in so different areas such as agribusiness export (Sawaya Jank et al., 2001; Khaksar et al., 2014), retail sales (Hernant et al., 2007), banking (Al- Muharrami, 2009), e-commerce (Porterfield et al., 2010), consumer demand (Stablein et al., 2011), internationalisation (Elango, 2011), performance after privatisation (Wu, 2007), logistics (Maloni et al., 2009), new product development (Veflen Olsen, 2010), location decisions (Zelbst et al., 2010), and branding (Damoiseau et al., 2011), among others.

4. Results

4.1. Imports and EU production

Figure 1 below details the evolution of total EU banana imports from ACP and Latin America countries and of EU production. From it, we can draw some important conclusions.

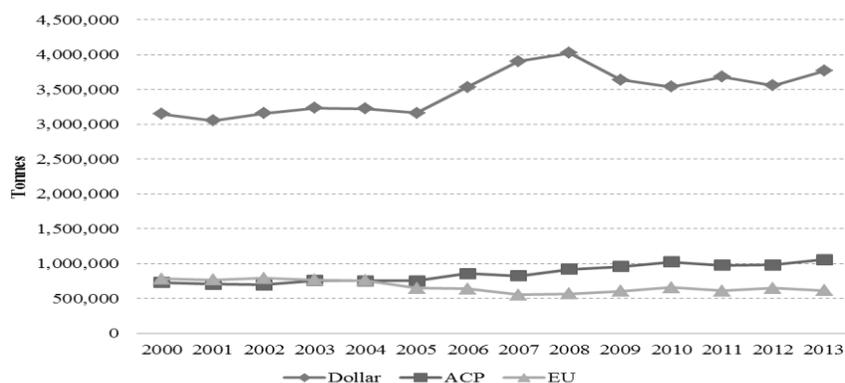
The first one is that the progressive reduction in MFN import tariffs has not been followed by a progressive imports' growth. Total EU imports have increased from 3.9 M tonnes in 2000 to a range between 4.5 and 4.8 M tonnes depending on the year.

Until 2008, both ACP and MFN banana imports have increased: From 730.000 to 918.000 tons (+26%) the first one, and from 3.15 M to 4.0 M tonnes (also 26%) the second. Since then, ACP bananas have continued to increase to 1.1 M tonnes in 2013 (+15%), and Sun bananas have decreased to 3.8 M tonnes (-6%). The progressive reduction in MFN import duties has not been followed by an increase in the market share of MFN bananas in the expenses of ACP exporters.

EU banana production has decreased in 2000 from 782.000 tonnes to 555.000 tonnes in 2007 (-30%) but has been recovering from then to 614.000 tonnes in 2013

"Banana War" and World Trade Changes

(+11%). It seems that the new regime has proved to be more effectively supportive of EU producers than the previous.



Source: Own elaboration, based on data Comext EuroStat

Figure 1. Banana Supply

Not all MFN countries have registered a parallel evolution. Beneficiaries are Colombia (+ 430.000 tonnes from 2000 to 2013 (+59%), and Ecuador (230.000, +22%). On the other side, Panama is the biggest loser (- 240.000 tons, 56%).

Similar disparities are observed amongst the ACP countries. The main beneficiary is the Dominican Republic (+ 263.000 tonnes or 440 %), today the first ACP exporter to the EU. The traditional exporters (Ivory Coast and Cameroon) are more or less stable. Other ACP exporters such as Belize, Suriname and Ghana are also on a positive move. The decline of the Windward Islands started well before 2006. "Since 1992, more than 20,000 of 25,000 farmers have gone out of the business." (Fairtrade, 2009).

4. 2. Prices

The issue of the price transmission between agricultural markets and consumers' prices has been deeply analysed by agricultural economists. Amongst the most recent papers, we can quote Brummer et al. (2013); Assefa et al. (2014) or Garcia-German et al. (2014). In the fruit and vegetable sector, Santeramo (2015) has looked to the tomatoes and cauliflowers markets. We are not aware of any, theoretical or empirical, study related to the bananas markets.

Table 1. EU 27: Summary of Changes in Wholesale Prices

Reference	Origin	1995-2000	2001-2006	2007-2012
	ACP	EUR 0,82	EUR 0,85	EUR 0,93
Average price	Dollar	EUR 0,92	EUR 0,94	EUR 1,03
	EC/intra EU	EUR 0,75	EUR 0,79	EUR 0,92
	ACP	- 0.2 %	0.8 %	- 0.7 %
Annual trend	Dollar	- 0.5 %	0.0 %	0.9 %
	EC/intra EU	- 2.4 %	4.1 %	1.6 %
	ACP	EUR 0,47	EUR 0,49	EUR 0,43
Gap (max-	Dollar	EUR 0,35	EUR 0,35	EUR 0,28
	EC/intra EU	EUR 0,36	EUR 0,33	EUR 0,37

Source: Own elaboration, based on Eurostat data

From 1993, when the European Common Market Organisation (ECMO) was established, until 2001 prices have decreased, more dramatically for European bananas. This movement is related to the way the ECMO was acting: The more EU and ACP bananas you traded in the European market (irrespectively of their price or quality), the more licence you got to import dollar bananas.

This perverse effect stopped with the change later introduced in the ECMO. First, prices started to stabilise or even increase, more for the EU than for the dollar bananas and for the ACP bananas. The decrease in EU production also contributed to explaining this trend.

4.3. Market Structure

According to FAO (2014), the international structure of the banana trade is changing, mainly due to the transformation of the global supply chain management: supermarkets in the US and Europe are the main actors, whereas in the nineties the market was controlled by Chiquita, Dole and Del Monte. Nowadays, the producers are taking advantage of being involved in the banana market, but need to have information and support from the producers' organisations. Our research got evidence that the "banana war" prompted these changes towards less trade economic concentration.

Looking for further explanations, this article has been focused on two main exporting countries - Ecuador and Colombia - and on the Dominican Republic, an ACP country. Obviously, other countries such Brazil, Peru, Colombia, Ivory Coast or Cameroon could deserve specific analysis.

4.3.1. Ecuador

This country is the most important exporter and has diversified export markets. Europe is the first client (40%), followed by Russia (24%); North-America (18%), Latin America (7%); Middle East (6%); Africa (4%) and Asia (2%).

It is a strong and competitive exporter (Anania, 2011) but has a comparative disadvantage compared to other major providers of dollar bananas which are closer to major markets since they do not have to cross the expensive Panama Canal to reach the Atlantic Ocean (Bright 2012). Therefore, it will always be a buffer supplier to the EU. In addition, as a relative newcomer, it had limited access to the EU import licences in the old trade regime. This is why Ecuadorian traders (Noboa in particular) have been so proactive in diversifying the markets.

Table 2: Ecuador Banana Export Structure Evolution (2005-2012)

Detail	2005	2006	2007	2008	2009	2010	2011	2012
HHI								
- EU export	1.190	1.046	996	949	873	897	710	533
- USA export	2.716	2.972	2.585	2.154	1.457	1.331	1.262	1.484
- all markets	1.289	1.153	1.048	912	752	484	384	354
Companies								
- EU export	61	61	69	76	88	111	142	169
- USA	62	77	77	77	77	95	100	109
- all markets	127	147	163	178	198	216	233	257

Source: Own 'élaboration, based on data of national customs service of Ecuador

"Banana War" and World Trade Changes

Between 2005 and 2012, the sales concentration (measured by the HHI approach) to the EU moved from "moderate" (1.190) to "low" (533) and for the US from 'high' (2.716) to "moderate" (1.484). The number of exporting companies increased by 202 %, 278 % for the EU, but "only" 175 % in the US (Table 2). As far as importers of Ecuadorian bananas are concerned, market concentration moves down from 2010 to 2012 to "low" (759) in the EU case but still high (2.753) in the US. The importing companies' increase has been even more significant in the US than in the EU.

4.3.2. Colombia

Colombia exports to the European Union have surged and represent 39 % of its total banana exports (mainly to United Kingdom, Belgium, Germany and Italy), followed by North-America (29 %).

Export trade is highly concentrated both in the US and in the EU. Producers in the main producing region have created a big company called "Union of Banana of Uraba" which contributes to 43 % of total exports. Other important exporting companies are Banacol (17,6%), United Banana Santa Marta (9 %), Technical Baltime of Colombia (8,6%), Banafрут (6,4%) and others (5,2%).

The "Union of Banana of Uraba" was created in 1966 and started exporting in 1969 when United Brand (today Dole) decreased its buying price. In 1970, it developed their own brand, "Turbana", in particular for the US market. In 1975, they started a strategic alliance with Walleman & TAs (today Fyffes) for the European markets. They have their own shipping company (Isabella Shipping) which was a real comparative advantage when the EU quota management was based on the 'first come, first served' principle.

For the same reason, the market concentration is still high amongst the importers, both in the US and in Europe.

4.3.3. The Dominican Republic case

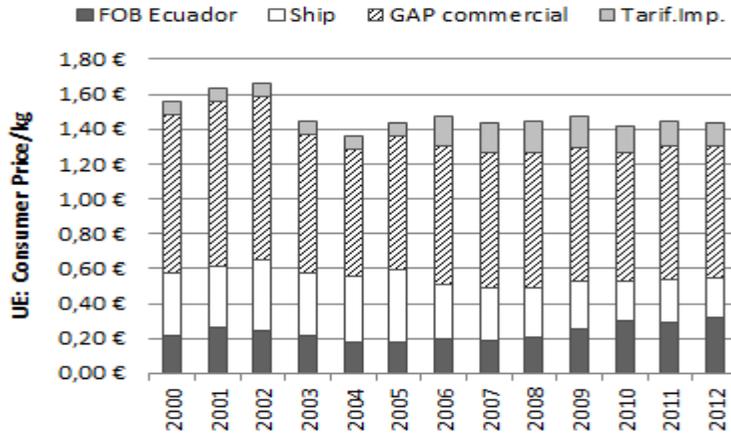
This is an ACP success story which can be summarised in one single word, organic that represented in 2011 more than 55% of total exports. The major markets are the United Kingdom (48%); Spain (11%); Germany (9%) and France (7%).

There are more than 1.500 small producers located in the provinces of Azua, Valverde and Montecristi. Trade is highly concentrated, with 2 major companies: Savid group (56% in 2012) and "Plantations" (29%). The third one is a producers' organisation, Banamiel, with more than 300 members (10%).

European demand for organic bananas is expected to increase 20% per annum over the coming 5 years (Agritrade, 2013). In the UK, their first market, the "banana pricing war" has exerted downward price pressure on suppliers. As said by Fairtrade (2009), "Bananas occupy a unique position in the shopping basket of the British consumers. After petrol and national lottery tickets they are the third most valuable of all products sold by the major supermarkets".

4. 4. Export Versus Consumer Prices

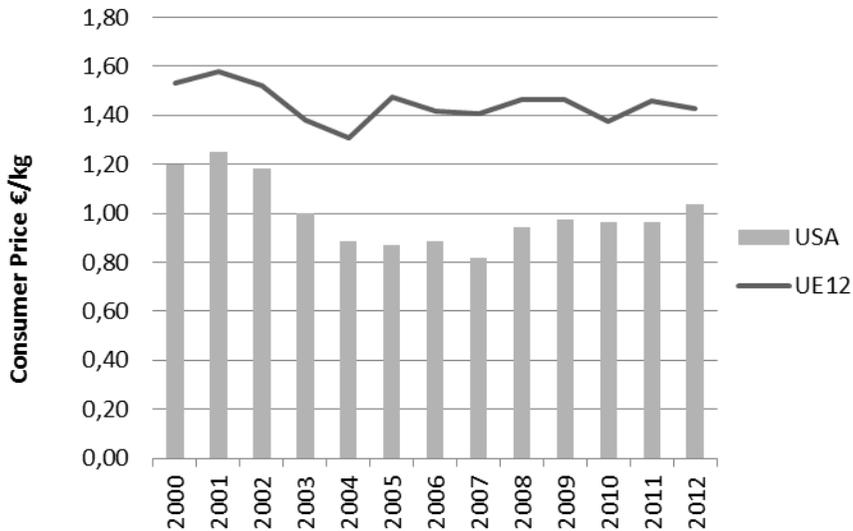
Figure 2, related to Ecuador exports, highlights the impact changes in the international trade structure: FOB export price increased; transport cost decreased and the commercial gap (difference between export and consumer prices) diminished.



Source: Own elaboration, based fp7 data from Customs Ecuador and Eurostat

Figure 2: Ecuador of Banana and Consumer Prices in Europe

At the same time, European consumers benefited from a lower price due to oversupply of banana in the market.



Source: Own elaboration, based on data USDA, berichte.bmelv-statistik (Germany); bdm.insee (France); Fyffes/Trimetric (UK); CSO/GFK (Italy) and Magrama Panel (Spain)

Figure 3: Consumer Price by Trade Region

These results cannot be understood without taking into account 2 technological changes that took place during the period and have contributed to transforming market

opportunities into economic realities. The internet is the first one and has reduced sunk costs, a particularly relevant issue for developing country's exporters (Freund and Weinhold, 2000; Clarke and Wallsten, 2006). The second one is the increasing trade containerisation which has not only stimulated international trade, but has also allowed small and medium exporters from developing countries to have full access to maritime transport (Hummels, 2007; Novo-Corti and Gonzalez-Laxe, 2009; Bernhofen, El-Sahli and Kneller, 2013). This is valid both for the EU and US market.

But a third factor intervenes in the EU case: the successive change in EU import rules allowing now free imports without any limitation or administrative requirement, which have reduced the comparative advantage of the traditional big trading companies. The global result is a decrease of their market share.

4.5. Discussion

Reality has not been smart enough to follow what the ex-ante analysis had predicted, been Read (2001) a partial exception: EU imports from the MFN have not increased and ACP exports have not collapsed.

The EU had to transform its border protection into "tariff only" a legal regime that increased market competition, promoted a quick structural adaptation and lowered prices for European consumers.

The challenge for ex post assessments is to find a way to distinguish and separate the different factors' effects on observed market developments. The preferential access granted to the ACP by the European Partnership Agreements is one of the main factors (Anania, 2011). In addition, the EU agreements signed with Central American countries and Colombia (Anania, 2010) had also implications for the banana markets. It is therefore a difficult task, but the findings and conclusions, based on recent available data on trade and market structure, are strong enough to be considered and discussed.

In order to address this issue, this research was concentrated in three countries which have followed completely different, but successful until now, approaches. Ecuador diversified its markets and developed private multinational companies; Colombia consolidated a major producer' organisation, a common brand and concentrated its sales in the few but relevant markets such as Germany and the UK; the Dominican Republic developed its organic production.

Technological changes had also consequences: trade "containerization" decreased transportation costs and allowed the development of some active small and medium companies, both importers and exporters acting in the international trade; Internet adoption had reduced 'sunk costs', which are particularly relevant for exporters in developing countries.

The EU "only tariff" not removed a major administrative barrier to trade. Nowadays there are more exporting and importing companies acting in the EU; market concentration decreased and competition increased. A more efficient and competitive supply chain helps the EU consumers and the third country's exporters (Agritrade, 2012). It enhanced the growing influence of supermarkets (Loeillet, 2012). Retailers were able to buy bananas directly from producers; the focus shifted away from value-added and brand building campaigns towards cost reduction strategies (Bright, 2012).

Finally, it seems that the global package composed by the equivalent tariff for MFN countries; a reshuffled the EU support to EU producers and the European Partnership Agreements with the ACP countries has been balanced and has delivered what was expected: a smooth and progressive opening of the European market which does not harm any major player significantly. This "impossible mission" (Guyomard et al., 2006) has been delivered successfully.

These results release a new question/issue: Is this evolution sustainable in a medium/long-term perspective? The increasing power of the supermarkets and the banana position in the shopping basket, show its vulnerability in the price-cutting battle between supermarkets (Fairtrade, 2009). Complaints emerged in 2012, stating that the costs of complying with stricter standards were not being covered by the prices paid to producers (Agritrade, 2013). This is particularly true in the UK market, the main EU market for organic and fair-trade banana, but also in other markets where competition among retailers is more severe.

5. Concluding Remarks

This research analysed the trade development between the EU and the main banana providers. Ex-ante analysis on the expected impact of the adoption of the EU “only tariff” focused on the main groups of exporters, either MFN and ACP countries. The mainstream thinking expected a significant increase of the MFN country’s exports at the expenses of the ACP.

But reality is more complex, as is shown six years later. Some MFN countries (in particular Colombia, Ecuador and Peru) behaved well as also did the Dominican Republic, an ACP provider. Other ACP countries (such as the Windward Islands) did not revert until now the declining trend observed for years.

Competition increased both at the export and import sides. Transport and logistic costs significantly decreased. European consumers, but also developing country’s exporters, took advantage of the quota rent disappearance.

The power of the banana food chain moved away from the “big five”: Chiquita (formally United Fruit Company); Dole Fruit Company (formally Standard Fruit Company), Del Monte, Fyffes and Noboa Chiquita), the key players in the “banana war”. Robert Reid (2001) was the only one who anticipated this evolution. The recent moves around Chiquita confirm fully our conclusions.

Ex-ante analysis are useful, but unable to fully catch the dynamic changes which happened that radical change in the EU regulation. This conclusion can be useful when analysing the possible consequences of other important moves, such as those which would be induced by a TTIP agreement. In addition, technological changes are creating new opportunities and have clear impacts on the final results.

A last comment related to disposable data: Current and available data are not enough to understand and catch the current changes happening. In the absence of detailed information related to countries such as Ecuador and Colombia, it is hard to understand the changes scale in the banana trade market.

Acknowledgements

We would like specially to thank Mary Brown, who did her best to translate our Spanish/English to English. Obviously, we are responsible for all the remaining mistakes.

References

- Agritrade (2010). *Banana Trade Issues for the ACP Executive Bref: Update*:
- Agritrade (2012). *Banana sector. Executive brief: Update*
- Agritrade (2013) *Banana sector. Executive brief: update*

"Banana War" and World Trade Changes

- Al-Muharrami, S. (2009): The competition and market structure in the Saudi Arabia banking. *Journal of Economic Studies*, 36 (5), 446-460.
- Anania, G. (2009). How would a WTO agreement on bananas affect exporting and developing countries? *ICTSD paper*
- Anania, G. (2010) The implications for bananas of the recent trade agreements between the EU and Andean and Central American countries. *Policy brief n°5 ICTSD*.
- Anania, G. (2011). Implications of trade policy changes for the competitiveness of Ecuadorian banana exports to the EU market. *Issue paper n°10*. ICTSD
- Assefa, T. T., Meuwissen, M. P.M., & Oude lansink, A.G.J.M. (2015). Price Volatility Transmission in Food Supply Chains: A Literature Review *Agribusiness*, 31/1
- Brezina, I, Pekár, J., Čičková, Z., & Reiff, M. (2014). Herfindahl–Hirschman index level of concentration values modification and analysis of their change. *Central European Journal of Operations Research*, april.
- Bernhofen, D., El-Sahli, Z., & Kneller, R. (2013). Estimating the effects of the container revolution on world trade. *CESifo Working paper: Trade Policy n°4136*, 158-179.
- Borell, B. (1997). Policy-making in the EU: the bananarama story, the WTO and policy transparency. *Australian Journal of Agricultural and Resource Economics* 41(2), 263–276.
- Bright, R. (2012). *The referee revolution and its impact on the banana trade. Contribution to the World Banana Forum*.
- Brunner, B., Korn, O., Schlüßler, K., Jamali Jaghdani, T., & Saucedo, A. (2013). Volatility in the after crisis period: a literature review of recent empirical research. *Ulysses working paper n°1*.
- Bucheli, M (2005). Bananas and Business. *The United Fruit company in Colombia, 1899-2000*. New York-London, New York University Press, 2005, 252 pp.
- Cardamone, P. (2011). The effect of preferential trade agreements on monthly fruit exports to the European Union. *European Review of Agricultural Economics*, 38(4), 553-586.
- Cioffi, A., & dell'Aquila, C. (2004). The effects of trade policies for fresh fruit and vegetables of the European Union. *Food Policy*, 29(2), 169-185.
- Cioffi, A., Santeramo, F. G., & Vitale, C. D. (2011). The price stabilization effects of the EU entry price scheme for fruit and vegetables. *Agricultural Economics*, 42(3), 405-418.
- Clarke, G.R.G., & Wallsten, S.J. (2006). Has the internet increased trade? Developed and developing countries evidence. *Economic Inquiry*, 44 (3), 465-484.
- Damoiseau, Y., Black, W.C. & Raggio, R.D. (2011). Brand creation vs acquisition in portfolio expansion strategy. *Journal of Product & Brand Management*, 20/4, 268–281.
- Elango, B. (2011). Does market context impact payoffs to Internationalization? *European Business Review*, 23 (5), 434-453.
- Emlinger, C., Jacquet, F., & Chevassus Lozza, E. (2008). Tariffs and other trade costs: assessing obstacles to Mediterranean countries' access to EU-15 fruit and vegetable markets *European Review of Agricultural Economics n° 35 (4)*, 409-438.
- European Commission (2008). *Evaluation of the system of entry prices and export refunds in the fruit and vegetables sector*.
- European Union (2014). *Bananas other than plantains. The banana sector is integrated in the Common Organisation of Agricultural Markets*. European Commission. Agriculture and Rural Development.
- Fairtrade. (2009). Unpeeling the banana trade. *A Fairtrade Fondation Briefing Paper*

- FAO. (2014). *The Changing Role of Multinational Companies in the Global Banana Trade*. Food and Agriculture Organization of the United Nations. Rome.
- Freund, C. & Weinhold, D. (2000). On the effect of the internet on international trade. *International Finance Discussion papers* n°693 Board of Governors of the Federal Reserve System.
- García Alba Iduñate, P. (1994). Un índice de dominación para el análisis de la estructura de los mercados. *El Trimestre Económico*, LXI(3), (243), 499-524.
- Garcia-German, S., Garrido, A., & Bardaji, I. (2014). *Evaluating Transmission Prices between Global Agricultural Markets and Consumers' Food Price Indices in the EU*. In 2014 International Congress, August 26-29, 2014, Ljubljana, Slovenia (No. 183039). European Association of Agricultural Economists
- Gassama, I.J. (2002). Confronting globalisation: Lessons from the banana wars and the Seattle protest *Oregon Law Review*. 81, 707-737.
- Guyomard, H., Herrard, N., Laroche, C. & Le Mouel, Ch. (1997). L'Organisation commune de marché dans l'Union européenne : impact de la taille du contingent tarifaire appliqué aux bananes dollar et non traditionnelles *ACP Économie & prévision*, n°127, 15-32.
- Goetza, I, & Grethe, H. (2009). The EU entry price system for fresh fruits and vegetables – Paper tiger or powerful market barrier? *Food Policy*, 34(1)
- Guyomard, H., Herrard, N., Laroche, C. & Le Mouel, Ch. (1997). L'organisation commune de marché dans l'Union européenne : impact de la taille du contingent tarifaire appliqué aux bananes dollar et non traditionnelles *ACP Économie & prévision*, n°127, 15-32.
- Guyomard, H. & Le Mouel, Ch. (2003). The New Banana Import regime in the European Union: a quantitative assessment. *The Estey Centre Journal of International Law and Trade Policy* 4(2), 143-161.
- Guyomard, H. Le Mouel, Ch. & Levert, F. (2006). The tariff-only import regime for bananas in the European Union: Setting the tariff at right level is impossible mission. *Invited paper prepared for presentation at the International Association of Agricultural Economists Conference, Gold Coast, Australia, August, 12-18..*
- Hernant, M., Andersson, T. & Hilmola, O.P. (2007). Managing retail chain profitability based on local competitive conditions: preliminary analysis. *International Journal of Retail & Distribution Management* Vol. 35 No. 11, 912-935.
- Hummels, D. (2007). Transportation costs and international trade in the second area of globalization. *Journal of Economic Perspectives*. 21 (3), 131-154.
- Josling T.E. (2003). Bananas and the WTO: Testing the New Dispute Settlement Process. In Josling T.E. and Taylor T.G. (ed.), *Banana Wars: The Anatomy of a Trade Dispute*, Wallingford, CABI Publishing, 169-194.
- Kastele, A. (1998). *The Banana Chain: The Macroeconomics of the Banana Trade*.
- Khaksar Astaneh, H., Yaghoubi, M. & Kaleteharabi, V. (2014). Determining revealed comparative advantage and target markets for Iran's stone fruits *J. Agr.Sci.Tech*, 16, 253-264.
- Loeillet, D. (2012). *The international banana market. From one world to the other Contribution to the World Banana Forum*. World Banana Forum — Working Group 02 — Second conference (Guayaquil, Ecuador, 28-29 February 2012).
- Maloni, M.J, Carter, C.R. & Carr, A.S. (2009). Assessing logistics maturation through author concentration. *International Journal of Physical Distribution & Logistics Management*, 39(3), 250-268.
- Myers, G. (2004). *Banana Wars: The Price for Free Trade: For Caribbean Perspective* Zed Books, 191 pages.

"Banana War" and World Trade Changes

- Novo-Corti, I. & Gonzalez-Laxe, F. (2009). Maritime transport and trade: the impact of European transport policy. An overview of maritime freight transport patterns. *European research Studies*, Vol XII n°1, 131-147.
- Porterfield, T.E., Bailey, J.P. & Evers, P.T. (2010). B2B eCommerce: an empirical investigation of information exchange and firm performance. *International Journal of Physical Distribution & Logistics Management*, 40 (6), 435-455.
- Read R. (2001). The Anatomy of the EU-US WTO Banana Trade Dispute. *The Estey Centre Journal of International Law and Trade Policy*, 2(2), 257-282.
- Santeramo, F. G., & Cioffi, A. (2012). The entry price threshold in EU agriculture: Deterrent or barrier? *Journal of Policy Modeling*, 34(5), 691-704
- Santeramo, F. G. (2015). Price transmission in the European tomatoes and cauliflowers sectors. *Agribusiness: an International Journal*. Doi: 10.1002/agr.21421
- Sawaya Jank, M., Paes Leme, M.F., Meloni Nassar, A. & Faveret Filho, P. (2001). Concentration and Internationalization of Brazilian Agribusiness Exporters. *International Food and Agribusiness Management Review*, 2(3/4), 359-374
- Spriegel, J. L. (2000). Will the banana war ever end: will the tariff only system be the solution? *Boston College International and comparative law review*. (24), 219-234.
- Stablein, T., Holweg, M. & Miemczyk, J. (2011). Theoretical versus actual product variety: how much customisation do customers really demand? *International Journal of Operations & Production Management*, Vol. 31 (3), 350-370..
- Theil, H. (1967). *Economics and Information Theory*. Amsterdam: North Holland
- Van de Kastelee, A. (1998). *The Banana Chain: The macro economics of the Banana Trade*
- Veflen Olsen, N. & Sallis, J. E. (2010). Processes and outcomes of distributor brand new product development. An exploratory examination. *International Journal of Retail & Distribution Management*, 38(5), 379-395.
- Wu, H.L. (2007). Exploring the sources of privatization-induced performance changes. *Journal of Organizational Change Management*, 20 (1), 44-59.
- Zelbst, P.J., Frazier, G.V. & Sowe, V.E. (2010). A cluster concentration typology for making location decisions. *Industrial Management & Data Systems*, 110 (6), 883-907.