GLOBALIZATION AND TRADE RELATIONS: THE US AND BRAZILIAN
ORANGE JUICE DISPUTE

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This thesis entitled
GLOBALIZATION AND TRADE RELATIONS: THE US AND BRAZILIAN
ORANGE JUICE DISPUTE

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Globalization has altered the world’s functioning and it is affecting trade disputes. Three ways in which globalization can alter trade disputes are: i.) trade barriers and protectionism generated by political economic motives, ii.) blurred national lines, and iii.) market concentration. Each of these aspects of globalization can be exemplified using the case of the dispute of US and Brazil over orange juice. In this industry, large international conglomerates end up lobbying for their private, not national interests. The most important findings of the study are that a very organized association can have the same power of a concentrated market and that concentration leads to more efficiency in the achievement of protectionist measures. When companies need inputs from several countries to produce their goods and have companies located in several countries, national lines become blurred. They lobby governments to engage in disputes in order to protect companies installed in their territory, independent of their nationality.

Approved:

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I dedicate this thesis to my brother, Fabio, for all he was to me when he was here and for everything he still is from far away. I also dedicate it to my parents, Jorge and Paula, and my sister, Daniela, for always being there for me, loving me, supporting me and taking care of me.
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CHAPTER 1 - INTRODUCTION

Globalization is changing the way the world functions and altering people’s lives. Increasing levels of communication and the exchange of data and goods is altering the way individuals interact. Globalization affects the relations among countries, individuals and companies. New structures emerge from this globalized world, as organizations are created to deal with all these new characteristics. There is not a global government and countries have to create international organizations to regulate international trade and other fundamental aspects of their relations.

No nation can produce everything it needs. Trade is used to increase the welfare of the population and, where comparative advantages exist, it can increase the amount of production, decreasing the price of the goods. The World Trade Organization (WTO) was created in 1995 to regulate commercial aspects of that relationship, making it easier to solve disputes diplomatically. All sorts of disputes can be solved in the organization, and some conflicts are on going for a long time among the countries. Mechanisms to solve disputes were implemented in order to prevent conflicts based on deteriorating commercial relations. However, there is always a sector that does feel harmed by trade, and tries to protect its interests in any way it can. Lobbying the government to protect certain commercial interests is the most common practice. Private or special interests have always had a significant impact on government policy.
The focus of this thesis is on how globalization affects trade barriers and in this specific case the analysis will be on the orange juice dispute between Brazil and the US. Since companies are multinational, the whole dynamic of international disputes changes and this is the main argument to be discussed in this paper. This study is going to use the case of the dispute among Brazil and the US over orange juice to describe how globalization affects trade disputes. The US and Brazil are the two biggest orange juice producers in the world. Brazil consumes less than 10% of its production and the US consumes mostly what it produces. The US is the biggest consumer market for orange juice in the world. The dispute is interesting because there is a complex network of the companies involved in the dispute. All the biggest Brazilian exporters are present in the American market and are fighting for their interest as are the American orange growers.

The main goal of this paper is to analyze the effects of globalization on trade disputes. The orange juice dispute is used as a case study to explain this process, in which the countries are not in the dispute fighting for national interests, they are being used by the companies to attend their commercial interests and to have profit. Both markets are concentrated and companies use their power to achieve what they want. In Brazil, since lobbying is not allowed by law, companies use their power to convince the proper organizations to persuade the government and start the disputes. In the US, lobbying is used to accomplish the goals of the companies. When the market is not concentrated, there are artificial ways to achieve the same results of a concentrated industry with organization, and this is also one of the topics discussed in this paper.
Chapter 2 provides concepts of globalization, analyzes the waves of globalization and describes its aspects that affect trade disputes. These aspects are: trade barriers and protectionism generated by economic political reasons, blurred national lines and concentrated markets. In Chapter 3, a description of the World Trade Organization and its dispute settlement system is presented. The creation of the system was an advance for trade negotiations and conflict resolution among countries. Chapter 4 provides the background of the orange juice sector of Brazil and the US, showing the particular similarities and the differences between them. The chapter ends with a brief explanation of the dispute between Brazil and the US over orange juice. Chapter 5 analyzes the aspects that affect trade disputes in the light of the Brazilian and American dispute over orange juice, while Chapter 6 summarizes findings and key conclusions.

Globalization affects trade disputes by changing the nature of the conflicts. The more organized and concentrated a sector is, the more its interests and demands will be satisfied by the power the organization has to lobby the government and impose their needs. This creates conflicts that were supposed to be about the interests of the country to be about private interests from the most powerful companies present in the country.
CHAPTER 2 – GLOBALIZATION AND THE ASPECTS THAT ALTER TRADE DISPUTES

Globalization has altered numerous aspects of the world’s manner of functioning. Interactions between people and countries have changed. The increased flux of people, goods, communication, and money is the effect of this globalization, caused by the development of new technologies, trade, and economic growth. All of these have transformed the world into a space without frontiers, or, in some cases, with smaller boundaries. Globalization occurs in several aspects and can be analyzed in different ways. Technology is the driving force of globalization, however, the politics can either prevent this process from happening or encourage it. In this chapter, the concept of globalization will be analyzed, as well as recent waves of globalization and the conditions of this process that alter trade disputes.

Concepts of globalization

The concept or definition of globalization varies, especially when the focus is on one specific facet of the process. In this paper, the focus is economic globalization, and the concepts shown will be restricted to this area. For Brawley (2003), “globalization usually refers to a multi-dimensional process whereby markets, firms, production, and
national financial systems are integrated on a global scale” (p.12). He uses this concept to show how the term can have different features depending on the area of focus.

For Stiglitz (2002) “it is the closer integration of the countries and peoples of the world which has been brought about by the enormous reduction of costs of transportation and communication, and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge, and (to a lesser extent) people across borders” (p.09). He explains how this new process has been accompanied by the creation of international institutions. There are the intergovernmental institutions such as the United Nations, the International Labor Organization and the World Health Organization. And there are institutions that govern globalization the main organizations being the International Monetary Fund (IMF), the WTO and the World Bank, which help by controlling the international relations of the countries.

Bhagwati’s (2004) concept focuses on the economic aspect of the process: “economic globalization constitutes integration of national economies into the international economy through trade, direct foreign investment (by corporations and multinationals), short-term capital flows, international flows of workers and humanity generally, and flows of technology”(p. 3). He highlights the role of the government as an agent to promote or stop globalization, giving as an example the 1930 Smoot-Hawley Tariff of the United States, which was a response of the American congress to the economic depression of the 1929 stock market crash that increased US tariffs to their highest level in that century (Cohn, 2005). Another important aspect he cites is the speed
of the transactions because of information technology. What may be positive in one aspect, can turn out to be negative. For example, the speed with which money can be withdrawn from the financial markets, just by pressing one button on the computer, billions of dollars are transferred from one country to another. The third aspect he identifies is the increasing feeling of insecurity people have nowadays with the sensation of a borderless world. Everything is so close and so gigantic that it makes people feel vulnerable.

The waves of globalization

The term globalization does not refer to a single phase. It can refer to different phases of the same process, which are characterized by different features, and by different reasons that made each of the phases emerge. It is also important to analyze what made each phase end in order to be able to analyze future behaviors of the markets.

Globalization is not a new process. It has been happening in the world for a long time, although only since 1980 the so-called new wave of globalization began. This process has been differentiated by the flow of integration, which has become stronger with the development of new technologies in all fields, but especially communication and transport. Economic globalization occurs through trade, capital flows and migration. The new wave of globalization is the third one that is defined. The first wave was reversed by
nationalism and the second one changed its features and became the third wave (World Bank, 2002).

The first wave of globalization occurred from 1870 until 1914. It was characterized by falling transport costs, and reductions in trade barriers. Commerce was based on the exchange of a land-intensive primary commodity by manufactures. Production by manufactures introduced a new need for labor. Migration occurred from Europe to North America and Australia, as a means to provide new workers. With the production of manufactured goods to be exported, foreign capital was also needed and accompanying this process, financial markets and information technology. The depression between the two World Wars retracted the globalization process into nationalist thought. The nationalist process brought protectionism and improvements in trade among the countries diminished, as well as immigration (World Bank, 2002).

The second wave of globalization started after the Second World War, in 1945, driven by a common thought of integrating the nations and internationalizing the world. The United Nations was created, and the General Agreement of Tariffs and Trade (GATT) was signed, with the proposition of the creation of a world with free trade. However, trade was not fully liberalized and the tariffs were only lowered for the goods for which the countries did not have an interest in protecting internally. The characteristic of this phase was the specialization of the developed countries in manufactured production, with the creation of clusters and the connection of industries which became vertically linked. Developing countries did not take advantage of this process, since the
conglomerated production was basically in the developed countries and barriers were imposed for several goods of the developing world (World Bank, 2002).

The new wave of globalization is characterized by the increasing volume of international migration and capital movements. Beginning in 1980, the developing countries began a new phase and some became a part of the world economy, while others tended to become more marginalized. Developed countries witnessed a major increase in the export of services. Decreasing costs have facilitated transactions throughout the world (World Bank, 2002).

This third wave does not seem to be near its end. Otherwise, the world continues to become more connected and commercial relationships are expanding. Globalization continues to move forward and does not seem to be retracting as it did during the first phase due to nationalist measures.

**Globalization’s aspects that affect trade disputes**

The final part of this chapter will analyze which of the important aspects of the globalization process affect trade disputes.
1) TRADE BARRIERS AND PROTECTIONISM GENERATED BY POLITICAL ECONOMIC MOTIVES

The volume of international trade has increased with globalization. Companies are looking for new markets to sell their products to, and, with the development of new technologies to store and transport the goods, the volume of international trade has increased. Trade can be a complex issue, since domestic companies may be harmed by international competition, and they may push for protectionist measures.

Some authors blame globalization for the problems generated by the increasing trade disputes, however, this is not a new issue. Globalization is a process that happens naturally, while protectionist measures happen because of the pressure of domestic groups that feel harmed by international competition. Since the beginning of the international exchanges, some benefit and some are harmed. With the new wave of globalization, from the 1980s on, this can be evidenced with the creation of the WTO and the WTO dispute settlement system.

On average, protectionist measures can diminish the economic well-being of a nation, particularly its consumers. The gains that arise from specialization and exchange are banished if trade barriers are imposed. There are several types of mechanisms with which a country can protect its market. Nevertheless, all forms of protection are used to improve the situation of a domestic firm when competing with an international firm. The
most common forms of protection are the imposition of tariffs, quotas, regulatory barriers, subsidies and exchange rate control. All these promote distortions in the market and so the price and the amount of goods available is altered, harming the consumers, in long term. If the protectionist measure imposed is a tariff, the government gains the income of the tariff, which is one more incentive to implement the measure (Coughlin et al, 2000).

The problem of imposing protectionist barriers is two-fold: (i) the costs to the consumer resulting from the measure, and (ii) the cost of collective action to remove the measure. Protectionist measures usually benefit few participants in the market, while costs are distributed. If the protectionist measure costs a thousand dollars for the consumers that is how much the companies protected gain. However, this amount is divided by thousands of consumers in that market, while the gains are monopolized in the hands of few companies. This explains why protectionist measures only end if there are powerful companies with the will and money to organize and lobby against that protection. If each consumer loses 0.10 cents of a dollar per pound of rice, for example, it is not worth the cost of getting together to complain about the protection. This is the problem of collective political action, in which there are two problems identified: the excludability and the cost of organizing a group.

The excludability problem can be explained because a collective political battle is a public good and so, if one is not contributing, the individual can still benefit from the others’ efforts. This is called free riding, when one does not contribute and
benefits from another individual’s contribution. On the other hand, one can believe their participation is so small that it does not make a difference to the group. This can diminish the contribution of all of the participants, diminishing the effect of the action or even ending it. To explain the high cost of the collective action, two arguments are cited. The first one is that, if the costs are fixed per individual, then as the number of individuals in the group increases, the greater the cost, and the opposite is true: smaller groups have a lower cost. The second is that, by having uncertain political results, the probability that the contribution of a member will decide the political outcome is greater in a small group than in a large one. Both these factors favor small groups in the search for protectionist measures (Alt & Gilligan, 2000).

A good example of this case is sugar in the US, in which the net social cost of the program to domestic consumers was between $136 million and $403 million dollars, with a per capita value ranging from $0.54 and $1.61 dollars. No individual was going to mobilize to fight for 54 cents, although the industry could do it for 136 million dollars minimum (Alvarez, 2005).

The imposition of trade barriers and/or quotas affects the competitiveness of national firms. Domestic competition and government regulations preventing monopoly or other forms of market distortion are cited as important sources for the success of industries in the international market. Porter argues (in Kim & Marion, 1997) that competition, to be effective, has to be from national firms, in the national market. In this case, there is information feedback and the pressure on the competitors in visible in the
market. Without this competition, the industry uses its resources inefficiently and does not engage in research and development activities. For Porter, the elimination of trade barriers would benefit industries allowing them to become more competitive.

The protection imposed by the government to a certain industry can generate problems in the whole chain of production. Mueller (1988) illustrates the problem describing the market power of the steel industry. Steel import quotas have been imposed and have damaged the whole sector because the needed amount of material could not be imported and the national price was high. Several companies lost in this case and the distortion was evident, as was the damage to the consumers and the companies.

With the end of trade barriers, private business can nullify the effect of trade liberalization since it can affect the competition in a certain market with exclusionary practices, such as demanding abusive conditions from suppliers using their monopoly power. It is be important that the government prevent this problem from happening, by implementing policies to equilibrate the market, such as anti-trust laws. If the government does not implement any act on behalf of national companies in order to protect them, the market will not be in equilibrium and so the consumers and the market itself will be damaged (Janow, 1998).

For some authors, globalization represents a threat to the industries, but this is debatable. With globalization, the competitive industries will benefit, as well as the consumers, which will not have to pay the protectionist price for a good they can buy from a company that is competitive and provides a free market price. Consumers and
companies will benefit from the process, leading to a better price for the consumers and
to more competition among companies.

2) BLURRED NATIONAL LINES

One of the most evident aspects of globalization is that it affects trade disputes
and blurs national lines. Since companies are free to move and produce their goods
wherever it is more profitable, national lines are not as defined. Cars, clothes, electronics
are made in several different parts of the world, mixing inputs in one location and selling
it to other markets. This aspect of globalization is well known, and can be seen all the
time.

Not only inputs are mixed, but also the market in which they sell their production.
Goods produced in Latin America are sold in the US, Europe, or Asia. There are
increasingly lower barriers for production. Governments impose barriers to the entrance
of goods, but not to the entrance of the plants, that bring financial benefits to the
countries, employment, and spillover effects, such as the creation of other companies to
supply the goods required by that plant, know-how in technology and the heating of the
whole sector, depending on the size of the plant. The establishment of a firm in a foreign
country happens for diverse reasons, among them the evasion of trade barriers,
transaction costs since the product would not have to be transported from one country to
the other, and the use of resources of the foreign country, such as cheap and plentiful raw materials and labor (Kim & Marion, 1997).

According to Co (2001), a multinational corporation’s (MNC) decision to enter a foreign market will depend on the interactions of ownership, location and internationalization factors. The firm’s advantage can be used in two different ways: i) by producing a product in the foreign country or ii) by licensing the production. Licensing can have many costs and may not be so advantageous. Sometimes the best solution is to go into the country and produce the product, especially if there are policies that encourage foreign direct investment (FDI) in the foreign country, or if there are location-specific disadvantages, such as tariffs. These two factors would lead the company to invest in FDI production instead of exporting or licensing the production.

Restrictions on international trade can make companies invest in production abroad. All kinds of restrictions exist: on transport costs, import restraints or a higher cost to export than to produce overseas. The most important and strategic reasons for overseas production are: i) potential competitors can be prevented from having access to any corporate or technological advantage that may be diffused; and, ii) “to the extent that a MNC’s competitive advantage rests not simply on codified knowledge but also on a range of tacit knowledge and expertise within the firm, the optimal means of exploiting this is through intrafirm overseas production rather than licensed production or subcontracting abroad”(Held at al, 1999, p.260).
The influx of foreign direct investments has increased dramatically in the past years. The numbers are impressive: 46,000 parent multinational companies are present in the world, with 280,000 subsidiaries in other countries. It is estimated that the stock of foreign direct investment is 3.2 trillion dollars, and sales total 7 trillion dollars annually. One figure is alarming: only 8 percent of foreign direct investment comes from developing countries. Although this figure is small, it has been increasing in past years. The rest, 92%, comes all from developed countries (Brawley, 2003).

Several companies that have their products taxed buy plants in the target country, instead of exporting to it. The Brazilian steel company Gerdau bought plants not only in the US, but also in Mexico. Mexico is another target market since the implementation of NAFTA (North American Free Trade Agreement). With the transfer of the plants to the consumer countries, the developing countries benefit in a variety of ways. (Such as Brazil that is exporting capital with the creation of companies in other countries). Another benefit of this practice is that, as some pieces are required for the production of the goods, it increases the exports of products too. Nevertheless, one of the principal political consequences is the end of the political impasses and controversies (Cardoso & Salani, 2004).
3) MARKET CONCENTRATION

The market is becoming progressively more competitive. As companies grow they end up buying smaller ones and the market continues to become more concentrated. Acquisitions happen on a daily basis. Businesses merge and the creation of multiproductive, multi-industrial multinational corporations occurs faster as these companies become giants.

A very concentrated market can turn out to be a monopoly market, or an oligopoly one. As the market becomes more concentrated, the more the companies engage into predatory practices. As Shughart (1997) explains:

“Concentration causes firms to engage in conduct that exploits the market power made available by the structural characteristics of their industry. The types of conduct that the structural paradigm associates with industrial concentration lead deterministically to performance results to fall short of the normative standards set by the model of perfect competition” (pg. 156).

Fundamentally, as the markets get more concentrated, the more the firms can charge consumers and monopolize profits. The more concentrated the market is, the more likely the firms will have higher profits (Shughart, 1997). Monopoly or oligopoly markets
do not suffer from free riding problem as the competitive market does, because fewer participants can have control over each others acts. According to Olson (in Mao & Zaleski, 2001), in a monopoly the occurrence of free-riding will decrease, since the private marginal benefits will exceed the private marginal cost. This increases the incentive to cooperate and prevent the participants from free riding.

Another important aspect described by Mao and Zaleski (2001) is that the more concentrated the industry is, the more the participants can cooperate to raise money and lobby the government. However, the need diminishes since as the industry becomes more concentrated and does not need protection from the government. This conclusion was reached by Grier at al (in Mao & Zaleski, 2001) with the argument that highly concentrated industries are more profitable and do not need protection. This argument can only be true for profitable industries. Not all cases are like that. In the sugar example, given in the first session of this chapter, without the protection given by the government to the industry, the companies would have fallen apart.

Market concentration leads to more trade disputes, since, as explained in the first section of this chapter, fewer participants cooperate better. When industries cooperate, they can lobby the government to achieve their goals. And, the smaller the group, the better the results, since they can organize and demand their interests. In a study made by Lopez and Pagoulatos (1994), welfare losses were associated with industry lobbying and the degree of the association depended on industry concentration. This shows that, the more concentrated the industry, the more power lobbying has on producing protective
results that will benefit industry interests, harming consumers who will have to share the losses relative to the industries’ gains.
CHAPTER 3 - TRADE DISPUTES AND THE WORLD TRADE ORGANIZATION

With globalization, the influx of commercial relation increases. As more interaction occurs among firms and countries, misunderstanding or battles about commercial interests increase. Disputes over the gains from trade are initiated by the sector damaged by the situation, or not making a profit because of a barrier imposed to protect a determined sector, or from the sector protected with the barriers. Krugman (1996) sees trade as a quasi-military competition, in which countries are fighting almost an armed war, in the same manner as a lot of policy makers, business leaders and influential intellectuals also do.

The importance of the creation of the WTO is evident in arguments as these, what this means is that, instead of having military conflicts, the preferred solution is diplomacy in the WTO. The WTO plays a major function in the world today. It is responsible for implementing rules on international trade and on solving disputes over the issues on which it has ruled.

The World Trade Organization

After the Bretton Woods conferences, negotiations to create an International Trade Organization (ITO) began. Twenty-three governments in 1947 signed the GATT.
GATT was going to be the basis for the creation of the ITO, but as commerce is a delicate issue, the United States Congress did not ratify the treaty. Without US support, the ITO was not created and GATT became used by default. The countries that signed the GATT were contracting parties instead of members, since GATT was just an agreement, not an international organization. However, as time passed, the GATT acquired some characteristics of an organization in its structure (a small secretariat, some committees and working parties) and its decisions were binding. The contracting parties decided to create the WTO, which had as a large part of its basis the GATT, in the Uruguay Round (Cohn, 2005).

Despite the similarities, there is one enormous difference between the 1947 GATT and the 1994 version. In the former one, it was necessary to have a consensus for the adoption of the decision of a panel, therefore if only one country opposed, the panel would be blocked. In the current version (1994 GATT) the system is different, unless there is a consensus to reject the ruling, it is adopted, and so, if a country wants to block a panel, it has to convince all the other countries to reject it (World Trade Organization, 2005).

The WTO was created in 1995. There were many negotiations, called rounds, and while their initial objective was only to lower tariffs, other issues were later discussed. These included dispute settlement, anti-dumping, non-tariff measures, telecommunications, technology, financial issues, intellectual property, agriculture, services, and trade policy reviews (World Trade Organization, 2003c). The basis for its
creation was the 1947 GATT, which was modified to change the terminology. Besides having the same basis and almost the same content, the two GATTs are two different treaties (August, 2003).

The WTO has a legislative function, which can be visualized as the countries get together in the organization to reach agreements, and a judicial function, in which conflicts are decided and rulings are made in the dispute settlement system (Lida, 2004). Ehlermann (2003) states that the latter function is not only judicial but political as well, which includes decisions of dispute settlement, in the panel or in the appeal, and the monitoring and multilateral enforcement and implementation of the decisions.

The WTO dispute settlement helps to avoid problems and even wars. All the participants have increased their trust in the system and through the WTO the weaker states can solve their differences with the stronger ones on an even level. If the WTO system did not exist, developing countries that have less economic power to bargain would be at a disadvantage (World Trade Organization, 2003b).

The basic premise from which the WTO develops its system is that free trade provides better results for all the participating states. Protectionist measures are very expensive for the government, as well as for the citizens and residents of the state. Free trade can increase people’s income, through new jobs and diminish the price they pay for products. A continuous flow of trade leads countries to enjoy better relations, a better result in their economy and in social conditions. However, economic interests in trade can damage economic and political relations (World Trade Organization, 2003a).
With the dispute settlement, once a rule is broken, instead of initiating a conflict, the problem is solved by analyzing the rules and a way for the rules not to be compromised. There have been increasing numbers of disputes in the past few years, which reflects how the countries are becoming more interconnected and strengthening their commercial ties. Also, instead of simply retaliating (e.g. taking unilateral decisions such as imposing barriers upon a country not following the rules), which could lead to a total break in the system, countries can now solve their problems in more constructive ways (World Trade Organization, 2003a).

Some of the principles and objectives of the WTO’s trading system are:

- non-discrimination: the rules have to be the same for all the countries, no discriminatory treatment is allowed;
- transparency: the system provides clear information about regulations, rules and policies;
- increased certainty: the rules have to be followed which leaves the participating countries with a certainty that their partners won’t behave in an improper way, and, if they do, measures to correct their behavior can be taken;
- simplification and standardization of procedures to simplify trade (World Trade Organization, 2003a).
Most of the decisions in the WTO are made by consensus. They are the result of negotiations between the governments and all rules are ratified by the members’ parliament (World Trade Organization, 2003b).

Brazil and the US are active participants of the WTO. Both have a long list of disputes, concerning many issues. Agriculture is one of them. The orange juice dispute between Brazil and the US is particularly interesting because Brazil was complaining about the US, and not the opposite. It is common for LDCs to complain about high agricultural trade barriers in developed world.

Source: WTO dispute settlement  
http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm

Figure 1 - Number of disputes in the WTO
Many of these cases involve the US, which is the most active country in the WTO. In a total of 335 cases, the US appears as the complainer in 81 cases and, with the exception of the European Community, most the complains are against developing countries, such as Argentina, Brazil, India and Mexico. As a respondent, the US is involved in 105 cases, with the highest number, again with the exception of the European Community; Mexico has 6 cases, Korea 7, Japan 8, Canada 13 and Brazil 8. Since the creation of the WTO in 1995, the LDCs are feeling more confident to fight against US international policy and this is shown in the number of panels opened. This data show that the more trade relations the countries have, the more they tend to have the disputes, although nowadays, with the decreasing numbers of disputes (Figure 1), it can be seen that the countries are trying to solve the commercial issues without complaining to the WTO. Instead, they are using the negotiations of the trade agreements for this purpose. This can result in a better solution if the country has commercial power to defend its interests, imposing a solution that benefits its population and companies, or in the worst case, if the country does not any have commercial power it is unable to defend its interest.
The WTO dispute settlement

The WTO dispute settlement is important to ensure that the rules are being followed by all members. Whenever a country feels that its rights are being infringed on by another country, instead of taking individual measures, it goes to the dispute settlement system and solves the problem there (World Trade Organization, 2003c). The dispute settlement was introduced by the Uruguay Round, with “more clearly defined stages in the procedure” (Dispute Resolution, 2005, p.11). A very important aspect is that to be effective, the Dispute Settlement has to happen quickly and without procrastination.

The “dispute settlement is the central pillar of the multilateral trading system, and the WTO’s unique contribution to the stability of the global economy” (World Trade Organization, 2005, p.01). Without the dispute settlement, the WTO’s rules would be ineffective, lacking a way to judge and solve conflicts, and enforce its decisions. The objective of the dispute settlement system is to analyze if one of the WTO agreements that the country signed was infringed upon (World Trade Organization, 2003b). According to Croley and Jackson (1996), “dispute settlement procedures assist in making rules effective, adding an essential measure of predictability and effectiveness to the operation of a rule-oriented system in the otherwise relatively weak realm of international norms” (p. 193).

The rules that govern the dispute settlement of the WTO are in Annex 2 of the Agreement Establishing the World Trade Organization under the name Understanding on
Rules and Procedures Governing the Settlement of Disputes. The major objective of the dispute settlement is for the issues to be solved between the parties, in conciliation. The dispute, if it arises, will not be seen as a contentious act and the parties shall act in good faith to solve the questions (Article 3 of the Understanding on Rules and Procedures Governing the Settlement of Disputes - URPGSD, 2005).

The Dispute Settlement Body (DSB) is responsible for settling the disputes. It is the General Council in another semblance, so it is formed by all WTO members. Among the Dispute Settlement Body’s functions are: to establish the panel of experts that will analyze the case, to accept or reject the panel’s rulings or the verdicts of an appeal, to monitor the implementation of the decisions and recommendations and to give permission for retaliation (World Trade Organization, 2005).

The substantive jurisdiction of the WTO panel is restricted to requests under WTO covered agreements, but international law applicable to the conflict resolution is not limited, so all the rules of international law can apply to it, to fill gaps and interpret the rules. And, in the same way, WTO rules can influence international law (Pauwelyn, 2001). During all stages, the parties can agree to ask for Good Offices, conciliation and mediation (Article 5 of the URPGSD, 2005).

The WTO is a very important international organization, and it is absolutely necessary in the current world, where countries are gathering together in trade blocks and strengthening their commercial relations and ties. When commercial relations are the issue, there are strong forces commanding the international market and the decision-
making. When a country signs an agreement, it has to comply with that, particularly because of the international law principle of *pacta sunt servanda*, and so, international relations will become more stable and reliable.

The WTO dispute settlement has brought enormous progress to the resolution of the conflicts between states, forming an institution that would have some of the features of the judiciary power of the states. By regulating the whole procedure, the binding agreements give more security and predictability to the parties when they feel their rights are being infringed upon. With regards to the criticisms, there are still some aspects that need to be improved in the dispute settlement system. Nevertheless, the way the system is implemented already shows progress and an improvement in the way to deal with the international relations of the countries. As with any international agreement, the issue of the power to enforce the decisions, in contrast with state’s sovereignty will always be questioned. However, the fear of ruining the whole progress in the relations and having a retraction (going away from free trade and towards protectionism) makes the countries comply with the agreements, binding them with the rulings of the WTO panels or the Appellate Body. Although the system is not perfect, so far it is has worked well and the direction is moving towards continued improvement. Discussions are always taking place in the Rounds and the system has continuously improved. The future cannot be predicted, but the effectiveness of the system can only lead to the continuing success of the dispute settlement system.
This chapter will analyze the background of orange plantations and orange juice production in both Brazil and the US. The production of frozen concentrated orange juice and its techniques were developed in the US and soon reached Brazil, due to the country’s vast potential for growing oranges. These conditions lead to the development of the orange juice industry in Brazil. Orange juice and orange fruits numbers will be analyzed to assess the power of Brazil and the US in world production since they are the leaders in the industry. Later, the dispute between Brazil and the US is described as background for the globalization analysis in chapter 5.

The American orange juice history

Citrus tree are not native to Florida. Instead, they come from Asia, however, the exact location is unknown. (Abecitrus, 2005). They were brought in 1493 by Christopher Columbus, and planted in Florida in the XVI century. The plantation was driven south because the trees could not stand the freezes. Florida has the perfect kind of conditions for the oranges to grow, which is sandy soil and a subtropical climate (Florida Juice.com, 2005b).
The US was the country that developed the know-how to produce orange juice. The first citrus processing plant was created in the US in 1915, and it was called Florida Fruit Products Co. In 1920, the first citrus concentrate was produced and in 1923, they started being produced commercially and sold in cans (FloridaJuice.com, 2005a). Frozen concentrated orange juice was created in 1945-46 by researchers from the Florida Citrus Commission (FCC) and from the USDA at the Lake Alfred Citrus Experiment Station (FloridaJuice.com, 2005a). Before the creation of the frozen concentrated orange juice, orange juice was expensive and seasonal because there was no method to preserve it for all of the seasons (Hart, 2004). After the development of new technologies to pack and transport the juice, refrigerated orange juice made from concentrate became more common and convenient, since it was ready for consumption. Differentiated products were introduced in the market to increase the diversification and attract the consumer (Binkley et al, 2001).

The United States is a major orange juice producer and consumer. One can find all sorts of different kinds of orange juice in the grocery stores. Low calorie, enriched with calcium, and enriched with vitamins and citrus blends are just some kinds of juices sold in the US. In addition, there are several basic kinds of orange juice sold by the industry to the retailers:

- Not from concentrate (NFC): juice pasteurized exactly after the extraction of the juice from the fruit.
- From concentrate (RECON): juice made by adding water to the frozen concentrate.

- Frozen concentrate (FCOJ): juice made by taking water out of the original juice and then freezing it. (Binkley, et al., 2002).

Most of the production is based in Florida, however, there are companies located in California, Arizona and Texas. According to Burden (2003), the American orange juice market “is a mature commodity market dominated by large-scale producer-packers or producer-processors. Within the US, the current market for large-acreage citrus growers is dominated by investment groups, insurance companies, large-scale grower groups, grower-packers, and packer-shippers” (p.01). Powerful groups are responsible for investing in the sector, which impacts the lobbying power of the companies, as we will analyze further ahead.

Florida’s citrus industry is estimated at US$ 9.1 billion and it employs 90,000 people (Burden, 2003). This data is essential to understanding the real dimensions and importance of the sector to the American economy, and so is the data provided in Figure 2, that shows the numbers of orange juice production, and imports and domestic consumption in the US. More than half of the orange crops in the US are processed into juice (Binkley et al., 2001). American production is primarily consumed in the country. Domestic consumption is greater than production and so, there is a need for imports. Another reason for the importation of Brazilian orange juice, given by the Associtrus’
president, Flavio Viegas, is that the flavor of Brazilian orange juice is required to meet
the perfect blend that pleases the American consumers (Aguiar, 2005).

Figure 2 - American orange juice production, imports and domestic consumption (metric
tons: 65 degrees brix)

Source: table retrieved from FAS/USDA available at
http://www.fas.usda.gov/psd//complete_tables/HTP-table6-118.htm
Although there are some trends in diminishing the consumption of orange juice, such as diets that call for reducing the consumption of sugar and carbohydrates, American domestic consumption has not diminished substantially in the past years. In fact, it has been diminishing since 1997, but had a slight increase in 2003 and 2004. Orange juice is linked to a healthy nutrition, and new kinds of juices were created to focus on the low carbohydrate diet.

Frozen concentrated orange juice was the dominant type of orange juice sold in the US, although this statistic is changing. Pasteurized orange juice (also known as not from concentrate) has increased in demand, however this can be related to some factors, such as: the increase in the consumer’s income, the preference for the more convenient juice (ready-to-serve is more convenient than frozen), the perception consumers have that the pasteurized juice is less artificial, and the increase in the price of substitutes (Mims at all, 2000).

The sales of not from concentrate orange juice has increased from 8% in 1987 to 47% in 2002. The numbers of reconstituted orange juice have not changed drastically: from 44% in 1987, it has slightly diminished to 41% in 2002. The numbers that show the most impact are from the frozen concentrated orange juice, which has decreased in sales from 47% (1997) to 12% (2002). This data refers to frozen concentrated orange juice bought by final consumers, not the industry buying it to produce the reconstituted juice (Lazich, 2005).
US exports of orange juice are insignificant, and this can be explained for two reasons. First, the consumption of orange juice is enough to absorb all the production. The second reason is that the American orange juice is not competitive in the world market. The prices are significantly greater than the Brazilian prices, and so American companies export an insignificant amount of their production.

**American imports of orange juice**

The US imports orange juice from several countries and Brazil is responsible for almost all of the imports, as the data in Figure 3 show. Mexico is the second largest exporter to the US, followed by Costa Rica and Belize. From the figure one can see the reason why Brazil is the country the producers are accusing of dumping (selling with a price lower than its production costs): it is the one that threatens American producers most. Mexicans pay around 30% import tax into the US, and Costa Rica, because of the US-Central American Free Trade Agreement (CAFTA), does not pay any tax (Ministério do Desenvolvimento, Indústria e Comércio Exterior, 2005b).
The Brazilian orange juice history

In Brazil, oranges started to be grown in 1530, with the Portuguese colonization of the country. Citrus trees were brought by colonizers that were looking for vitamin C to fight the disease scorbutic, which killed millions of people in the ships during the expeditions. All sorts of citrus were introduced to Brazil and oranges became so adapted to the country that they were confused with native trees. This is not so surprising, because the oranges were introduced in Brazil only 30-40 years after its colonization, and the miscegenation of the orange trees with Brazilian species gave existence to another kind
of orange, called the Bahia orange. This species is so special that it was even sent to the US in the 1870s and spread throughout the world with the name Washington Navel (Abecitrus, 2005).

During the Nineteenth century, when the coffee plantations were growing throughout Brazil, the orange cultivation followed and reached areas inside the country, as a complimentary crop. Oranges were eaten by the rural population of farms and the rest was sold in the cities. In the beginning of the Twentieth century, oranges started being seen as a commercial activity. Brazilians did not know how to cultivate or treat the oranges and they used the American manual, “The cultivation of citrus fruits”, that was published in the US in 1926 and in Brazil only in 1952. At that time, Brazil did not have research on the orange juice sector, so the American manual was used for some time (Abecitrus, 2005).

In the beginning of the Twentieth century, the production was concentrated in the states of Rio de Janeiro and São Paulo, but developed more in São Paulo, which later overtook production and became the leader in the orange production (Braga and Silber, 1991). The government started seeing oranges as a viable export product, and in São Paulo it even distributed seeds as an incentive for the production. In 1910, Brazil started exporting to Argentina, in limited quantities. The São Paulo government even sponsored citrus-related research in the 1920s, as a way to foster the production in the state (Braga and Silber, 1991). By 1927, citrus exportation became more voluminous and by 1930, oranges were one of the ten most important exported goods. In 1932, the orange business
was so profitable that people were switching activities to start cultivating oranges, and by that time, São Paulo was already the largest producer (Abecitrus, 2005). With the great depression, coffee farmers switched sectors and started producing oranges as an alternative crop (Braga and Silber, 1991).

The Brazilian industry was created using the American model in the 1950s. Yet, only around 1960 did the Brazilian industry of orange juice and other orange sub products gain importance. After the 1962 snow in the American orange groves, Brazil started exporting orange juice and in 1963 it exported more than 5 thousand tons of juice, the equivalent of more than 2 million dollars (Abecitrus, 2005).

Braga and Silber (1991) cite that the main reason for the development of the Brazilian industry were the freezes that damaged Florida crops in the 1980s, and allowed the Brazilian industry to overtake the American producers. As a reaction to this process, American producers started demanding trade barriers to protect their industries.

Brazil is the largest producer of oranges in the world, followed by the US. It grows more oranges than the US, and it is the leading country of production, as we can see from Table 1. Brazil produces almost one third of the world’s oranges, although the production has decreased in past years, due to the increased number of diseases attacking orange groves.
Table 1 - Orange production in the world, from 1999 to 2004

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>25,236</td>
<td>23,513</td>
<td>18,721</td>
<td>20,427</td>
<td>18,668</td>
<td>20,124</td>
</tr>
<tr>
<td>United States</td>
<td>9,824</td>
<td>12,997</td>
<td>12,221</td>
<td>12,374</td>
<td>11,545</td>
<td>12,930</td>
</tr>
<tr>
<td>Mexico</td>
<td>3,880</td>
<td>4,203</td>
<td>4,448</td>
<td>4,237</td>
<td>4,376</td>
<td>4,376</td>
</tr>
<tr>
<td>Spain</td>
<td>2,966</td>
<td>2,884</td>
<td>3,195</td>
<td>3,160</td>
<td>3,408</td>
<td>3,417</td>
</tr>
<tr>
<td>Others</td>
<td>23,480</td>
<td>23,981</td>
<td>24,912</td>
<td>24,556</td>
<td>24,908</td>
<td>25,215</td>
</tr>
<tr>
<td>World</td>
<td>68,692</td>
<td>70,884</td>
<td>66,649</td>
<td>68,039</td>
<td>66,190</td>
<td>69,241</td>
</tr>
</tbody>
</table>


According to Cepea (2005), the factors that make Brazil the most competitive country in the world are:

- abundant offer and high quality juice production;
- oranges grow during the whole year;
- low costs of production, since Brazil has a lot of cheap land and labor;
- great weather;
- closeness of the productive sector to the ports, which makes it easier to disperse the production; and
- high scale industries own their own ships for juice distribution, private ports and a very strong coordination channel.

There are approximately 17,000 orange growers in Brazil. These growers are not homogeneous in property size or in number of trees. Most the growers are small farmers; 92% of them have less than 20 thousand trees, 7% have between 20 and 100 thousand
trees and only 1% of the growers have more than 100 thousand trees (Lopes et al., 2004). Since most of them are small, it has not given the growers negotiating power to demand higher prices on the oranges.

However, research by Lopes et al. (2004) shows that the result was that most growers prefer to sell to the orange juice industry than to the in natura market (where all fruits are sold raw). One reason may be that the industry, although more concentrated, makes future contracts, so prices are guaranteed. The other reason is that the in natura market buys as soon as the oranges are ready to be sold, and so, there is more demand volatility, which can cause price fluctuations. The USDA (2004a) reports that there has been a steady flow of fruits from the north and northeastern states to the region of São Paulo (in the Southeast), since the price paid by the industries is much more attractive than the prices they find in their states.

The State of São Paulo is the most important one in the field, producing 70% of the Brazilian oranges and 98% of the juice (Abecitrus, 2005). It also has around 75 percent of the total Brazilian land planted and harvest for oranges, and is responsible for processing most of the frozen concentrated orange juice (Table 2). Brazil does not import any orange juice. The domestic consumption is relatively minimal, when looking at the production numbers (Figure 4).
Brazilian orange juice production, imports and domestic consumption

Figure 4 - Brazilian orange juice production, exports and domestic consumption (metric tons: 65 degrees brix)

Table 2 - Brazilian orange PS&D (1,000 ha and million 40.8 boxes)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>2002/03</th>
<th>2003/04</th>
<th>2004/05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Planted</td>
<td>792.9</td>
<td>805.4</td>
<td>832.4</td>
</tr>
<tr>
<td>São Paulo</td>
<td>600</td>
<td>609</td>
<td>636</td>
</tr>
<tr>
<td>Others</td>
<td>192.9</td>
<td>196.4</td>
<td>196.4</td>
</tr>
<tr>
<td>Area Harvest</td>
<td>727.2</td>
<td>727.9</td>
<td>733.9</td>
</tr>
<tr>
<td>São Paulo</td>
<td>542</td>
<td>539</td>
<td>545</td>
</tr>
<tr>
<td>Others</td>
<td>185.2</td>
<td>188.9</td>
<td>188.9</td>
</tr>
<tr>
<td>Processing FCOJ</td>
<td>315</td>
<td>243</td>
<td>308</td>
</tr>
<tr>
<td>São Paulo</td>
<td>305</td>
<td>230</td>
<td>295</td>
</tr>
<tr>
<td>Others</td>
<td>10</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: Data retrieved from USDA, 2004a.
São Paulo’s importance is even more notable when one looks at the orange juice production numbers (Table 3). Brazil’s production for export is mostly of frozen concentrated orange juice, especially because the pasteurized juice is still very costly to transport and maintain because of its short shelf-life.

Table 3 - Brazilian frozen concentrated orange juice (million 40.8 kg boxes, TMT, 65 degrees brix)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>2002/03</th>
<th>2003/04</th>
<th>2004/05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivered to Processors</td>
<td>315</td>
<td>243</td>
<td>308</td>
</tr>
<tr>
<td>São Paulo</td>
<td>305</td>
<td>230</td>
<td>295</td>
</tr>
<tr>
<td>Others</td>
<td>10</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Beginning São Paulo Stocks</td>
<td>151</td>
<td>240</td>
<td>62</td>
</tr>
<tr>
<td>Total Production</td>
<td>1354</td>
<td>1092</td>
<td>1322</td>
</tr>
<tr>
<td>São Paulo</td>
<td>1309</td>
<td>1040</td>
<td>1270</td>
</tr>
<tr>
<td>Others</td>
<td>45</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>Total Supply</td>
<td>1505</td>
<td>1332</td>
<td>1384</td>
</tr>
<tr>
<td>Exports</td>
<td>1250</td>
<td>1252</td>
<td>1252</td>
</tr>
<tr>
<td>São Paulo</td>
<td>1205</td>
<td>1200</td>
<td>1200</td>
</tr>
<tr>
<td>Others</td>
<td>45</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>Domestic Consumption</td>
<td>15</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Ending Stocks</td>
<td>240</td>
<td>62</td>
<td>114</td>
</tr>
<tr>
<td>Total Distribution</td>
<td>1505</td>
<td>1332</td>
<td>1384</td>
</tr>
</tbody>
</table>

Source: Table retrieved from USDA, 2004a.
Brazilian exports to the US

Brazil is a developing country that relies on its exports as a source of revenue, since it imports a wide range of goods. The exports are an important source of revenue and are used to equilibrate the trade balance, bringing dollars to the country. Orange juice plays an important role in the commercial trade balance for commodities.

The number of Brazilian exports fell in 2000 and 2001 because the international price had an enormous retraction. However, the US is not the main market for Brazilian exports, although it has an important market share of Brazilian exports, as shown in Table 4. The percentage of Brazilian exports that are sold to the US has ranged from 13 to 19% in the past 9 years. This number could increase if there were no barriers in the American legislation. The exports to the European Union account for 70% of the total of exports. The import tax ranges from 12% to 70% over citrus products, varying according to the time of the year and the good (Ministério do Desenvolvimento, Indústria e Comércio Exterior, 2005b).

A study by Ministério do Desenvolvimento, Indústria e Comércio Exterior (2005b) argues that, if there were no barriers to orange juice in developed countries, Brazil would not change its participation in Europe, because it is already the dominant supplier. However, in the US, Brazil would substantially increase its participation, with the elimination of some producers, which would not be competitive enough to face Brazilian competition.
Table 4 - Percentage of Brazilian exports that are directed to the US

<table>
<thead>
<tr>
<th>YEAR</th>
<th>EXPORTS FOR THE US</th>
<th>TOTAL EXPORTS</th>
<th>% OF BRAZILIAN EXPORTS FOR THE US</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US$ FOB</td>
<td>KG</td>
<td>US$ FOB</td>
</tr>
<tr>
<td>1996</td>
<td>275814958</td>
<td>231542778</td>
<td>1396836949</td>
</tr>
<tr>
<td>1997</td>
<td>184172675</td>
<td>209621954</td>
<td>1006660930</td>
</tr>
<tr>
<td>1998</td>
<td>203615355</td>
<td>18632477</td>
<td>1266424346</td>
</tr>
<tr>
<td>1999</td>
<td>205611667</td>
<td>213977291</td>
<td>1239033843</td>
</tr>
<tr>
<td>2000</td>
<td>192413260</td>
<td>252258047</td>
<td>1033646269</td>
</tr>
<tr>
<td>2001</td>
<td>112371880</td>
<td>177854379</td>
<td>845094498</td>
</tr>
<tr>
<td>2002</td>
<td>150810596</td>
<td>211408298</td>
<td>1040753100</td>
</tr>
<tr>
<td>2003</td>
<td>191119730</td>
<td>292176153</td>
<td>1192979783</td>
</tr>
<tr>
<td>2004</td>
<td>119151451</td>
<td>216759739</td>
<td>1058090916</td>
</tr>
</tbody>
</table>

Source: Ministério do Desenvolvimento, Indústria e Comércio Exterior available at http://aliceweb.desenvolvimento.gov.br

Orange juice consumption and production in the world

The production of orange juice is concentrated in four countries: Brazil, the US, Mexico and Spain. Spain is famous for producing fruits in natura, because of its climate, production techniques, harvest and plantation. Mexico, because of NAFTA, is a main competitor of Brazil, since the importation taxes are very low, at 30%, from exports to the country into the US. Brazil is the most competitive country in orange juice, having very low costs of production (Ministério do Desenvolvimento, Indústria e Comércio Exterior, 2005b).

The consumption of orange juice is concentrated in developed countries. The main markets for the products are the United States, Japan, Germany, the United Kingdom, France and Russia. Western Europe consumes 30 percent of the fruit juices in
North America and Europe together account for more than 90 percent of the world consumption. According to the Food and Agriculture Organization of the United Nations (2003), the markets for processed orange products seem to be increasing in other regions, especially in Latin America. Mexico’s consumption increased almost 70 percent and Brazil’s consumption increased 54 percent from 1987 to 1998. Brazil does not have a history of processed orange juice consumption. It is cheaper to buy the fresh fruit and make freshly squeezed orange juice, besides the fact that it tastes much better. However, rising incomes in Brazil have increased the demand and consumption of processed orange juice.

On the other hand, the consumption of the fresh fruit is decreasing in the developed countries and increasing in many of the developing countries, such as Mexico, India, Argentina and Brazil. According to the Food and Agriculture Organization of the United Nations (2003), fresh orange consumption is declining for two reasons: consumers are replacing it by processed orange juice consumption because the not from concentrate orange juice can easily duplicate the fresh-squeezes in flavor and it is very convenient. The other reason for the diminishing consumption is due to the progress that has been made in transportation and storage processes, oranges now face competition with other fruits, such as bananas, grapes and strawberries. The predictions for the orange production are that it will stop its expansion and the per capita consumption will decline. This is going to be caused by several diseases that affect Brazilian and American groves.
Brazil and the United States dispute over orange juice

The dispute between Brazil and the US over orange juice is old. The barriers imposed by the American government started in the beginning of the Twentieth century and are increasing in the Twentieth first century. This battle does not seem to be close to an end.

The first orange juice tariff was established in the 1930s with the Smoot-Hawley Tariff Act. The tariff imposed 70 cents per single-strength equivalent gallon on imported citrus juice. During the negotiations of the GATT, the tariff was cut in half. No more reductions were made in the 60s or in the 70s, since the Florida citrus industry fought all the attempts to reduce the tariffs (Hart, 2004).

In the mid 1980s, Florida growers filed a formal complaint against Brazilian producers in the International Trade Commission. The decision of the commission was that Brazilians were dumping frozen concentrated orange juice. The price they were selling it to the US was lower than the one they were selling it in Brazil. So, since 1987, the US has imposed tariffs on imported orange juice. The tariffs were around 63 percent, and this high tax added 30 cents to the price of a gallon of juice to the American consumer (DePalma and Romero, 2000).

The first reason given by the Florida growers for supporting the imposition of the tax was that Brazil did not need to meet safety and health standards. Other reasons given were possible subsidies and the use of child labor. Brazil denies all these accusations
Andrew W. LaVigne, the chief executive officer of Florida Citrus Mutual, stated that without the tariffs, the industry would collapse, so that the tariff is the only thing that keeps the industry still in business (DePalma and Romero, 2000).

On August 16, 2002 Brazil submitted a complaint about a tax called Equalizing Excise Tax, which is charged over the orange juice imported into the US (Gomez, 2004a). The Florida government charged local producers with a tax known as Box tax and this income was directed to publicity and advertising of the fruits and citrus products from Florida. The reason given to charge the equalization tax was that the imported juice would have an advantage over the national one, since the American producers had to pay the Box tax. However, the Box tax was charged over the fruits, and the Equalizing Excise Tax charged over the frozen concentrated juice. Another irregularity is that the money collected with the Box tax was only used to advertise Florida products, not all citrus products, including imported ones. Besides all this, Florida was the only state that charged the Box tax, so that all the production from the other states did not have to contribute and still had an advantage over Brazilian goods (Dianni, 2002). The major complaint was that the tax was against the WTO’s national treatment principle.

The Equalizing Excise Tax was around US$ 40 per ton of frozen concentrated orange juice. Some American companies, among them Cargill, Louis Dreyfus and Citrovita, which buy Brazilian orange juice, filed a case to consider the charge of the tax as unconstitutional. They won the case in the American court, which was decided in
March 2002 by Judge Dennis Maloney, from Polk County, Florida. The decision was appealed (Dias, 2002), and, in 2003 the Citrus Department agreed to suspend the tax and paid US$ 1.5 million to archive the case (“Suco de laranja brasileiro”, 2003).

In 2002, the taxes paid by Brazilian exporters were totalizing 44.7%. Furthermore, the Brazilian government decided only to complain about the Equalizing Excise Tax, leaving the discussion about the import tax, which is in agreement with the rules of the WTO, to the negotiations of the Free Trade Area of the Americas (FTAA). Nevertheless, these taxes hurt Brazilian exports (Dianni, 2002). This will be an ongoing debate, since the Brazilian government is not willing to accept a trade pact that does not include agricultural negotiations (“The geopolitics of orange juice”, 2002).

In May 2004, Brazil withdrew the complaint against the US in the WTO. The decision was made because an agreement was reached with the US. The two countries sent a joint letter to the WTO, arguing that they reached a mutually satisfactory solution to the Equalizing Excise Tax. The solution reached was that the imported juice is only going to be charged for one-third of what it was (lowering it to about US$ 13). Also, instead of the Box tax revenues being used for marketing and advertisement, the income of the tax will now be directed to the Florida Department of Citrus, to finance research projects in the area of citrus. This new law was approved in the Florida Legislature in March, and ratified by the Governor Jeb Bush on May 12 (Benson, 2004).

On December 27, 2004, the orange juice producers association of Florida (Florida Citrus Mutual) accused Brazil of dumping and required additional taxation of Brazilian
orange juice. Although Brazilian producers already pay an import tax of US$ 418 per ton of concentrated frozen juice and US$ 13 per ton of the Equalizing Excise Tax, the producers wanted to increase the taxes over these imports. The Florida producers are accusing Brazil of dumping its prices 37% lower than its costs of production. Some specialists said that the real reason for the protectionism request is that the consumption of orange juice in the US is decreasing, so, by diminishing the competition, the offer of foreign imported juice would diminish and increase revenues of domestic producers (“Exportadores rebatem acusação de dumping”, 2004). However, the dumping accusation in the case of Brazil is highly contentious given that Brazilian exports charge an identical price to the American market as to the European Union where there would be no incentive to dump given the limited competition in Europe.

On August 17, 2005 the United States Department of Commerce decided to impose an additional import tax on Brazilian orange juice with values that range from 24.62% to 60.29%. Montecitrus has to pay 60.29% over tax, Fischer S.A., 31.04%, Sucocrítico Cutrale 24.62% and all the rest 27.16% (Dantas. 2005). The request was made by the companies Southern Gardens, A. Duda &Sons, Citrus World and by Florida Citrus Mutual (Bautzer, 2005). These complaints were made five months before the revocation of the previous overtax that was imposed in 1987. According to Sotero (2005), orange juice is one of the most protected goods in the US, and, in 2004, when Brazil exported 606.5 million liters to the US, the actual import tax was 65%, the highest one in the country for all imported goods.
The decision is only preliminary and the over tax is only going to be implemented in January 2006, until then, Brazil plans to debate the issue with the US, without involving the WTO. The American industries that have plants in Brazil, such as Dreyfus Citrus, the owner of Coinbra, did not suffer any imposition of the over tax, only the Brazilian companies (Reuters, 2005).

The president of the Associação Brasileira dos Citricultores (Brazilian Association of the citrus producers) said that the Americans need the Brazilian oranges to blend with theirs, in order to improve the color and the flavor of the American orange (Aguiar, 2005). Therefore, in a certain way, as the US needs Brazilian oranges to make the orange juice taste and look better, it cannot restrict all commerce with Brazil.

Brazil and the US have had a continuing history of orange juice disputes. The disputes started in the 1980s; they continue today and probably will still exist in the future, since private interests are built strong in this subject. This issue is so important to both countries that it is one of the issues preventing the formation of the FTAA. Negotiations always stop in the agricultural sector, and one of the enormous issues is the orange juice barriers. It is clear that in the history of trade organizations that organized industries, or industries with market power, can significantly influence the establishment of trade barriers. Determining how the globalized environment influences trade barriers in the orange juice industry could provide an important explanation for the behavior of the parties in the US and Brazilian orange juice dispute.
The orange juice dispute between Brazil and the US can be used to understand the effects of the globalization process in trade disputes. Large scale orange juice production in Brazil started during the new wave of globalization in the 1980s, due to the reasons cited in the previous chapter. Brazil’s natural conditions and the other previously discussed factors led to successful production and because of this American producers were fearful of Brazil’s inherent advantage. They felt the only solution to escape competition was through the imposition of trade barriers. The scenario of the dispute was explained in the previous chapter and the aspects that alter trade disputes are now going to be analyzed.

The data used in this thesis was found in Brazilian and American governmental documents and studies. Since it is very hard to find data for all the firms in the market, and only people who have information from insiders can really calculate it, I rely on data found in the literature. The American lobbying data was found in the website Lobby Watch: the center for public integrity, and for Brazil, since lobbying is not allowed by law, the assumption is that the more concentrated the industries are, the more power they have to demand that the organizations responsible for their representations, called Confederações (confederations), fight for their interests.
The other data used in this paper is the ownership of the companies. By analyzing who owns each company, where they are headquartered and where they have plants, the changing structure of the globalization will be analyzed. Therefore, how has globalization affected trade barriers, since the companies are located worldwide, and the interests that motivate the disputes are private and not public?

Analysis

1) TRADE BARRIERS AND PROTECTIONISM GENERATED BY POLITICAL ECONOMIC MOTIVES

As shown in the previous chapter, the US has been imposing tariffs on orange juice for a long time, and this has been the most beneficial way of protecting the market. Although other measures could be imposed, only tariffs are applied for the juice. Besides the numbers of the tariffs, the associations created by the orange growers or orange juice producers to defend their interests are indicative of protection. Associations fight for their interests instead of each grower or company negotiating for themselves. The only problem is free riding (when an individual does not contribute to the achievement of the goal and takes advantage of it), although in the Brazilian case, the small number of competitors (only 4 exporting companies) makes it difficult to free ride. In the American situation, the contribution is collected from the growers by Florida Citrus Mutual.
Therefore, it is possible to free ride, although the numbers of participants in the industry is not high (the most important companies are 11).

1.a) Brazilian Associations

The Brazilian companies that export orange juice are in an association called Abecitrus, which means the Brazilian Association for Citrus Exporters (Associação Brasileira dos Exportadores de Cítricos). This association is responsible for representing the sector to the government, making their demands and fighting for their interests (Neves and Marino, 2002). Besides this association, the industry is represented by the Industry’s confederation (Confederação das indústrias), and the confederation can represent the firms in the negotiations with the government, not in such a specific way as Abecitrus, because it represents the whole industrial sector, not just the orange juice industry.

Associtrus is the association of the Brazilian citrus growers (Associação Brasileira dos Citricultores). It represents the citrus growers. Associtrus was inoperative for 6-7 years, until September 2003, when it was re-established. The intention of the reactivation is to become the citrus growers’ voice in the citrus industry and, by requesting meetings with Abecitrus, establish new ties to negotiate (USDA, 2004a). To represent the growers, there is the Brazilian Confederation of Agriculture (Confederação...
The mayors of major citrus growing counties of the State of São Paulo formed an association known as the State of São Paulo Citrus Counties Association (AMCISP). The goals are to create a political base to support the citrus growers, and develop regional cooperatives and packing houses. Other goals are to create incentives for domestic consumption at local schools and promote the nutritional aspects of orange juice (USDA, 2004a).

Brazilian citrus growers were powerless in the last years, especially since the industries are becoming even more concentrated (as shown in the third section of this chapter) and they were without representation for the past years. Nevertheless, with the re-establishment of Associtrus, it is possible for the growers to unite and become stronger to demand appropriate measures from the government to protect their interests with the industry.

1.b) American Associations

The Florida Citrus Commission was the association created in 1935 to replace the Florida Citrus Exchange, which was the association created in 1910 to market fresh citrus and research the citrus processing procedure (Hart, 2004). The first cooperative of orange growers was established in 1927: the Florida Citrus Growers Clearing House. It later
became the Florida Citrus Mutual, which started operating in 1948 (Hart, 2004), although it only became official on March 25 1949 (Florida Citrus Mutual, 2005). The need to create a cooperative came from the market fluctuations in the price of oranges, causing the orange growers to lose money. In 1949, Florida Citrus Mutual had more than 6,000 members and set as its primary goal, raising prices for growers to sell their goods. It already had a lot of power after its creation and in the 1949-1950 season, it established a minimum price for citrus. This power did not please the orange processors, which challenged its price stabilization methods and requested, in 1954, an investigation by the Federal Trade Commission. Five years later, Federal Trade Commission decided that Florida Citrus Mutual was violating the Sherman Antitrust Act (Florida Citrus Mutual, 2005).

After this decision, Florida Citrus Mutual decided to restructure its goals and direct its acts to provide market information and price forecasting. Later, other goals were implemented, such as the implementation of state and federal legislations for advertising and research and for preventing tariffs to be diminished. Florida Citrus Mutual is the association responsible for convincing the US Department of Commerce that Brazil was dumping frozen concentrated orange juice in 1987 (Florida Citrus Mutual, 2005). They fought and are still fighting to keep the tariffs high and protect the American growers from international competition, especially coming from Brazil.

Today, Florida Citrus Mutual is raising money for a fund that will raise US$ 7 million in 2005 and 2006, with the goal of paying publicity and lobbying. The president
of Florida Citrus Mutual, Andy LaVigne, stated that if the negotiations for the FTAA
start producing effects and the tariffs for orange juice were abolished, American
producers would last a couple of years, and then would be taken out of the market. La
Vigne said that they are asking the producers to voluntarily contribute US$ 0.015 per box
of oranges (Gomez, 2004b). In the third section of this chapter the lobby numbers will be
shown.

The more organized the industry is, the more it can fight for their interests. 
Associations can be used as an important tool in the fight for power, since they can act as
one actor instead of thousand of small growers trying to decide what action to take. The
best illustration of this is the Florida Citrus Mutual, which is composed of an enormous
number of producers, and is reaching its goals with organization. A very organized
association can have more power than a concentrated industry, because it would have the
role of just one actor. If Brazilian growers were as organized as Florida Citrus Mutual,
they would be able to seek for better prices for their goods, and pressure the government
to take actions to protect more their sector, just like American growers do. This
association is fundamental because companies cannot complain at the WTO.
Nevertheless, it is important for the companies to have the government willing to make
the complaint, because, otherwise, the dispute cannot be initiated. The more concentrated
an industry is, the more efficient it is when achieving protectionist measures, because it
has more power to lobby the government and impose its requests.
2) BLURRED NATIONAL LINES

Since 1992, two Brazilian companies: Cutrale and Citrosuco started producing in the US. The other two big companies that are present in Brazil: Dreyfuss and Cargill produce in the US too. The companies decided to buy plants in the US, because the tariffs charged by the American government are too high and make the product uncompetitive (Indústria de suco brasileira produz direto nos EUA, 2002).

From 1996 until 2000, the participation of foreign companies in the Brazilian citrus income was 31%. This shows the importance of foreign companies in Brazilian exports (Ministério do Desenvolvimento, Indústria e Comércio Exterior, 2005a). According to Cepea (2005), in the end of the 1990s the four biggest companies were responsible for 40% of the American installed capacity.

The most important Brazilian companies are listed in Table 5. Cutrale is a Brazilian family-owned company group and is a major Coca-cola partner. Citrosuco is also Brazilian owned, and it belongs to the Fisher Group (Neves, 1997). Coinbra-Frutesp is also known as Louis Dreyfuss and is French owned. Cargill is an American company.

The connection of the companies that operate in Brazil and the US is amazing. Table 5 shows how the distribution of the plants of the four main companies in Brazil and the US. Citrosuco bought Alcoma, in Lake Wales for US$ 45 million. Cutrale bought two Coca-cola units in Auburndale and Leesburg. Cargill bought two plants, in Froostproof
and LaBelle. Louis Dreyers bought Winter Garden. So these four companies were well positioned in both markets, by having plants in the two countries (Neves, 1997).

Table 5 - Companies operating in Brazil and in the US in 1997

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>HEADQUARTERS</th>
<th>PLANTS IN BRAZIL</th>
<th>PLANTS IN FLORIDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cargill</td>
<td>Minneapolis (US)</td>
<td>Bebedouro</td>
<td>Frostproof and Labelle</td>
</tr>
<tr>
<td>Cutrale</td>
<td>Araraquara (Brazil)</td>
<td>Araraquara, Colina and Conchal</td>
<td>Alburndale and Leesburg</td>
</tr>
<tr>
<td>Citrosuco</td>
<td>Matao (Brazil)</td>
<td>Limeira, Matão</td>
<td>Lake Wales</td>
</tr>
<tr>
<td>Louis Dreyfus</td>
<td>Paris (France)</td>
<td>Bebedouro, Matao and Sergipe</td>
<td>Whinter Garden</td>
</tr>
</tbody>
</table>


Cargill sold their juice operations in Brazil to Citrosuco and to Cutrale in July 2004. In 2004, Cargill had four citrus production farms, two processing plants, and agreements (“Cargill sells its Brazilian juice operations to Citrosuco and Cutrale”, 2004). This shows how the market is becoming increasingly concentrated and how the companies in the sector are continuing to become more powerful in the market.

Another aspect is the import of frozen concentrated orange juice, object of the dispute between Brazil and the US in the WTO. As already cited, the import of the Brazilian orange juice is necessary to make the perfect color and flavor that the American consumers appreciate. This shows how the inputs are also mixed and how the markets are
interdependent. In a globalized market, the tendency is to mix inputs from different
countries and to transfer plants to countries where they have higher comparative
advantages in production.

Another aspect of the globalized world is how trade disputes are changing in the
past years. Countries are the only members allowed to make complaints in the WTO,
companies cannot do it. Since companies cannot start cases at the WTO, they use
countries to do it. The way they do it is by lobbying the government or just using their
power to make the government act in the way they want it to. And, one more interesting
fact is that since multinational corporations are installed in several countries, it does not
matter the country of their citizenship; they will pressure the government of the country
in which they have interests in order to increase their revenue. Louis Dreyfus is a French
company and is fighting for their welfare in Brazil and in the US. In the defense of its
interests, the company will be in the side of the most profitable position, not ideology, not
citizenship, only profit.

As countries are the only entities allowed to make claims in the WTO, they
engage in disputes in order to protect companies installed in their territories, independent
of the nationality of the company. If a large multinational corporation is installed in a
country that does not have a lot of economic development and other investments, the
country will try to protect the interests of that company, so that it does not lose
investment and revenues that come from taxes, salaries, and social security, among other
things. The benefits from the installation of a multinational company can be numerous
and they are all thought of when a country initiates a dispute in the WTO to please the company installed in its territory.

It is a two way road. Companies are lobbying the government to protect their interests, and governments are protecting the companies to protect the revenue and all other benefits they get from the functioning of the plants at the same time.

3) MARKET CONCENTRATION

3.a) Brazilian market

In the 1990s Brazilian firms of frozen concentrated orange juice became fewer and gained market share, increasing the market concentration. Large firms incorporated smaller ones. According to Lopes et al (2004), in 2004 there were 18 crushers functioning in Brazil from which 15 are in the state of São Paulo and 3 in Paraná. In 2001, the five main exporting firms of orange juice were: Sucocitro Cutrale Ltda, Citrosuco Paulista S.A., Coinbra-Frustesp S.A. (Dreyfuss), Citrovita Agroindustrial and Montecitrus Trading S.A. From the data available in Table 6, the whole concentration process can be seen and above all Sucocitro Cutrale has been the company to most increase its market participation. These firms are very competitive especially because they buy raw material very cheap and the bulk transport system is very efficient, as already cited.
According to Ministério do Desenvolvimento, Indústria e Comércio Exterior (2005a) the industry in Brazil controls the whole channel of production, from the plantation until the processing of the fruit. It is present in the packaging and in the international distribution of the good. From Brazilian orange production, 71% is destined to be processed and only 0.6% to be exported *in natura* (fresh fruit). Only 28.4% of the fruits are destined for internal consumption. The production and processing of *in natura* fruits for exportation needs to become more efficient, especially because of the sanitary restrictions applicable in the countries of destination. The same barriers exist for the juice; however, it is less rigid. In Brazil, all the industries that process the juice also pack it. No company purchases the product and independently packs it. Brazilian firms are producing in other countries, especially the US, to gain the ability of approaching the consumers in a more intimate manner. Cutrale and Citrosuco have strategic alliances with Coca-cola and Pepsi-cola.

Table 6 - Brazilian exporting firms of concentrated orange juice

<table>
<thead>
<tr>
<th>Firm</th>
<th>Market Share % of exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1998</td>
</tr>
<tr>
<td>Sucocitro Cutrale Ltda.</td>
<td>29.2</td>
</tr>
<tr>
<td>Citrosuco Paulista S.A.</td>
<td>19.9</td>
</tr>
<tr>
<td>Coinbra-Frutesp S.A.</td>
<td>9.5</td>
</tr>
<tr>
<td>Citrovita Agroindustrial</td>
<td>7.5</td>
</tr>
<tr>
<td>Montecitrus Trading S.A.</td>
<td>6.4</td>
</tr>
<tr>
<td>Others</td>
<td>27.5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Data retrieved from Neves et all, in Lopes et all, 2004.
The data from Table 7 shows the concentration ratios for the Brazilian companies during the period of 1997 until 2001. The concentration ratio is a widely used measure of market share. It is used to quantify the size and distribution of firms in a specific market. Almost any economic variable can measure the concentration, but the most commonly one is industry sales (market share). The formula used to calculate this is called the n-firm concentration ratio (CRn). CRn is the share of total sales accounted for by the industry’s n largest firms (Shughart, 1997). The industry members are ranked in a scale from the largest to the smallest and then the economic variable (usually the industry sales) is divided by the industry total to determine its market share. The most commonly used measures are CR4 or CR8. For example, a CR4 value 80 would indicate that the four largest firms control 80% of the market, and so forth. The disadvantage of using the concentration ratio is that it does not describe properly the size of each of the n firms. It only describes the share of the n firms (Shughart, 1997). The index CR8 is not even computed because, as said before, the concentration process has substantially diminished the number of exporting companies. So, from 1999 on, there were not 8 exporting companies.

Table 7 - Concentration ratio for Brazilian exporting orange juice companies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CR4</td>
<td>63.3</td>
<td>66.1</td>
<td>67.4</td>
<td>72.4</td>
<td>90.2</td>
</tr>
<tr>
<td>CR8</td>
<td>84.3</td>
<td>84.9</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Data retrieved from Neves and Marino, 2002.
3.b) American market

In 1989, there were 27 Florida firms processing orange juice. In 2001, this number decreased to 18. This data shows that the American orange juice market is going through the same process that the Brazilian market is, with high concentration (Binkley et al., 2002). The American market is constituted of companies that control large shares of the market at all different stages, such as processing, packaging and distribution stages. As they are concentrated, they make more profit more in expenses of consumers and orange growers (Binkley, J. et al., 2002).

Table 8 shows the companies that are cited in the US International Trade Commission’s Preliminary report of certain orange juice from Brazil, concerning the imposition of a overtax on Brazilian frozen concentrated orange juice, as requested by American orange growers and extractors of orange juice. These are the most important companies in the American market for orange juice. The report discusses the positions of the companies related to the dispute. Citrosuco, Cutrale, Louis Dreyfus, Peace River and Tropicana oppose the imposition of the overtax. The imports from Cargill, Cutrale, Fisher/Citrosuco and Montecitrus where being investigated and the imports from Louis Dreyfus were still in the process of being decided (US International Trade Commission, 2005).
Table 8 - American extractor/processors and their position in the petition

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>POSITION IN THE DISPUTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Duda and Sons Inc.</td>
<td>Supports</td>
</tr>
<tr>
<td>Cargill Inc.</td>
<td>not mentioned</td>
</tr>
<tr>
<td>Citrosuco North America Inc.</td>
<td>Opposes</td>
</tr>
<tr>
<td>Citrus World, Inc</td>
<td>Supports</td>
</tr>
<tr>
<td>Cutrale</td>
<td>Opposes</td>
</tr>
<tr>
<td>Freshco</td>
<td>not mentioned</td>
</tr>
<tr>
<td>Holly Hill Fruit Products Inc.</td>
<td>Supports</td>
</tr>
<tr>
<td>Louis Dreyfus Citrus Inc.</td>
<td>Opposes</td>
</tr>
<tr>
<td>Peace River Citrus Products Inc.</td>
<td>Opposes</td>
</tr>
<tr>
<td>Southern Gardens</td>
<td>Supports</td>
</tr>
<tr>
<td>Tropicana Products Inc.</td>
<td>Opposes</td>
</tr>
</tbody>
</table>


As cited above, the Florida Citrus Mutual started a campaign among its associates with the goal of raising money to lobby the government on behalf of their interests. These numbers have increased substantially since 2002 (the year of the dispute regarding the Excise Equalizing Tax). From 1998 to 2004, the amount spent by Florida Citrus Mutual, including lobbying costs, was $3,040,000 dollars. In 2002 it was $100,000 dollars. In 2003 this number jumped to $1,320,000 dollars and in 2004 the amount increased even more: $ 1,620,000 dollars (www.publicintegrity.com).

The companies that oppose the petition are not part of Florida Citrus Mutual, and most of them did not spend money on lobbying. Citrosuco did not spend on lobbying from
2001 forward. Cutrale does not have a record with The Center of Public Integrity. Louis Dreyfus spent less than $10,000 from 1998 to 2004. Peace River Citrus Products Inc. does not have a record in the database, as well as Tropicana. However, Tropicana is part of Pepsi Co. and this company spent $7,155,000 on lobbying from 1998 to 2004. This may be the reason for failure among the companies in the petition, the lack of group cooperation to lobby and demand a satisfactory decision for their interests.

Despite the fact that Brazil has a comparative advantage in the production of orange juice, because all the factors cited in chapter 3, it also has less participants in the market, making it easier for the firms to cooperate and demand what they want from the government.

Minute Maid’s preferred supplier is Cutrale and Citrosuco is Tropicana’s supplier, although Tropicana also has processing plants (Hart, 2004). Tropicana is the most sold orange juice in the US. In 2004 it led the American market with 44.7% of refrigerated orange juice sales. It is followed by Minute Maid, with 21.8% of the market (table 09). Tropicana is owned by Pepsi Co. and Minute Maid by Coca Cola Co.

Valdir Virtuan, a Brazilian producer, states that Brazilians lose around US$ 400 million per year because of American trade barriers (Gomez, 2004b). In a study by Armah Jr and Epperson (1997), they found that US producers and exporters of frozen concentrated orange juice have some influence on the factors that affect the demand of their exports in the market. It was also found that they control their own-price and the
promotional efforts, that can both be managed to increase revenue. This shows the market power of American producers, and how they protect their prices with tariffs.

Table 9 - United States top 10 refrigerated orange juice brands by market share from November 2003 to November 2004.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tropicana Pure premium</td>
<td>44.1</td>
</tr>
<tr>
<td>Private Label</td>
<td>15.5</td>
</tr>
<tr>
<td>Minute Maid Premium</td>
<td>15.5</td>
</tr>
<tr>
<td>Florida’s naturval</td>
<td>8.9</td>
</tr>
<tr>
<td>Simply orange</td>
<td>5.7</td>
</tr>
<tr>
<td>Minute Maid premium heart wise</td>
<td>0.8</td>
</tr>
<tr>
<td>Citrus world Donald Duck</td>
<td>0.7</td>
</tr>
<tr>
<td>Tropicana Healthy Heart</td>
<td>0.6</td>
</tr>
<tr>
<td>Minute Maid Premium for kids</td>
<td>0.6</td>
</tr>
<tr>
<td>Dole</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Top Brands of refrigerated orange juice (2005).

The companies are not organized in the dispute. Each one is defending their own position and private interests are directing the company’s position in the political dispute. The company’s goal is profit and it does not really matter if the growers are being able to keep the prices they need to pay their costs. Their revenue is what matters, and, if they can buy cheaper frozen concentrated orange juice from Brazil, that is the position they take.
Another interesting point is that even in a concentrated market, organization leads to success, because, if the American companies all had the same position, they would be able to lobby against the lobby from Florida Citrus Mutual, or to pressure with them and put even more barriers to Brazilian orange juice. However, the companies diverge in their position in the dispute and with this behavior, they lose power. So, if in a concentrated market the companies get organized, they will be even more powerful in seeking to defend their benefits.
Globalization has increased the world integration and its functioning, and this new wave does not seem to be retracting. Instead, it seems as though it is becoming stronger and more intense every day, affecting more companies and countries. The power of the companies is growing tremendously and some even fear that it could become superior to the power of the state.

In this study, globalization aspects that alter trade disputes were analyzed, using the orange juice dispute among Brazil and the US as the perfect example to illustrate this theory. Brazil and the US are the leaders in orange juice production in the world, and both industries are concentrated and mobilized to forward their interests. The dispute started in the 1980s and is still active today.

But how does all this affect trade disputes? Since the corporations do not belong to a single country, the fight is not among countries anymore. The fight is about their private interests and profits. Wherever the profit is, that is where the interest in the dispute will be, and the companies will lobby the government to change the legislations to make it better for their interests. Company A will not fight for the interests of the American consumers, it will fight for their own profits, even if it costs more for American consumers, who will have to share the bill for protectionism. As Brazilian companies will do the same. This chapter will summarize the main findings of this study.
- **The organization of the industry improves its power.** The organization of the Brazilian market makes it possible for them to achieve their goals with political efforts, since lobbying in Brazil is against the law. However, as the sector becomes more concentrated, it can pressure the government to act in favor of their interests.

- **Multinational companies fight for their interests in all countries, not just in the country of their nationality.** Louis Dreyfus is a French company that produces in Brazil and in the US. It does not have interests in the well-being of the population of either country. Instead, it positions itself in the disputes on which ever side will bring about the most profit.

- **Companies need inputs from several countries to produce their goods.** Mixed inputs are an evidence of globalization. As long as the necessity of buying goods that can only be produced in a place (because of physical conditions) still exists, therefore the whole production cannot be transferred to the target market. The other factor that does not allow the transferring of the whole production is the comparison of the costs of producing in both countries. In Brazil, it is much cheaper to produce orange juice than in the US and that makes the companies continue to import Brazilian juice in the American market. The other reason is the individuality of the flavor of the Brazilian juice that pleases the Americans.

- **A very organized association can have the same power of a concentrated market.** Although the costs of association are high for a large number of
participants, if they manage to do it properly, without or with few free riders, they can achieve more success than the industries with a concentrated market. Florida Citrus Mutual is more successful than the orange juice companies that are against the dispute, because the growers are organized and behave as one. This leads to another conclusion: that **concentration leads to more efficiency in the achievement of protectionist measures**, since Florida Citrus Mutual could be considered as one “company”, instead of several producers.

- **Even in a concentrated market, organization leads to success.** American industry, although concentrated, has divergences in the position of the companies in the dispute what makes it lose power. Not all the companies are supporting the case in the US International Trade Commission. If they had the same position, they could be more powerful than Florida Citrus Mutual.

- **Private interests direct the company’s position in political issues.** Mixed interests can alter the nature of trade disputes, because instead of fighting for keeping the production in the country, the fight is to improve profits. Not all companies are supporting American trade barriers because their main goal is to continue profiting and not to protect orange growers.

- **Countries engage in disputes in order to protect companies installed in their territory, independent of their nationality.** Since only countries are allowed to be active in the WTO, whenever the interests of the companies installed in their territory are in danger, the country can defend their interests by filing a complaint
in the WTO. The nationality of the company does not really matter if the company is economically relevant to the economy of the country.

The character of the dispute has changed. Private interests are overcoming public interests and this occurs because the companies work together to lobby the government for what they want. Consumers do not do the same, since they are huge in number and transaction costs are not worth it.

Since companies do not belong to just to one nationality, and they are not established in only one country, the nature of the fights have changed. Instead of fighting for the countries’ ideals, the conflict is based on private interests, and the countries assume the dispute in order not to lose that company, because as soon as it stops being profitable for the multinational corporation to produce in a certain location, it will look for a more profitable area.


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