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THE SUPPLY CHAIN THROUGH DIRECT TRADE IN AGRIBUSINESS COFFEE: A LOOK AT THE PERSPECTIVE OF ITS AGENTS

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ABSTRACT

The main objective of this study is investigating how the new model of coffee trade, known as Direct Trade Coffee has increased worldwide and how it has changed the supply chain in coffee trade. Through interviews by multiple-case method, the agents of supply chain coffee as producers, roasters and cafeterias demonstrated your perceptions in trade production, distribution and selling specialty coffee. The Transition Cost Economics theory was used to understand how large the asymmetric information, opportunism and limited rationality impacts the supply chain value overall. This study is value to support the understanding of short and more fair coffee to negotiate.

INTRODUCTION

In an increasingly dynamic and integrated economy, which information is constantly permeability in the agro-industry sectors, the informational symmetry and economic development of both producers and roasters are put in the agenda, requiring a rational and behavioral analysis of their agents. Factors such as negotiation, contracts and mutual relationship between sellers and buyers, begin to reconfigure the coffee production chain, peculiarly the specialty coffees (special or gourmet ones). This article aims to demonstrate the new trend that has grown worldwide in the supply chain of specialty coffee market known as *Direct Trade*. This new model aims not only to shorten the supply chain's coffee, but also seeks to increase the relationships between the agents since the coffee producer to the final consumer changing, in this way, the traditional supply chain's coffee. Although studies about *Direct Trade* in coffee agribusiness have grown in the last decades, especially in the last few years linked to research on the Third Wave of Coffee, which is focused on specialty coffees, there are still, few studies that try to understand the supply chain of *Direct Trade* at coffee trade as a whole. Therefore, this article sought to deepen an understanding the impression of this theme

abroad. It was evident through this research that Direct Trade is a trend in the specialty coffee market, but its similarity with the principles of coffee certification and requires further studies would be developed to consolidate the shortening of the coffee supply chain and optimize the aggregation of value of all links in the coffee chain.

Literature Review

Theoretical Background: Global coffee consumption has increased considerably in recent years. Brazil is the largest producer of coffee in the world and the second in consumption. A range of coffee varieties arises dynamically, requiring the coffee sector methods and actions aimed not only at increasing production but also at analyzing the impacts these increases have on the environment, people and the economy (Silva, 2006). The coffee certifications as FairTrade, UTZ Certified, RainForest Alliance Certified appear with the objective to certifying producers that, throughout the production, have to fulfil environmental and social standards, characterizing to be a specialty coffee, although this is not an affirmative condition that they will be able to obtain a quality coffee (Pinhero, Nagai, 2014). On the other hand, the demand for specialty coffees has altered the dynamics of the global market, as buyers are investing directly in coffee growers, taking risk instead of facing future market price volatility. Certified

coffees have been a trend in recent decades and the causes of their growth are the benefits that certifications bring. High prices paid to coffee growers, openings to new markets, maximization of production longevity and valorization of labor routines are the "flagship" of Certifications (Guimarães, 2016). In order to optimize the process between growers and roasters, a new model of coffee bargaining arises, with the objective of paying a "real fair price" to the coffee grower in the acquisition of a higher quality coffee. Direct Trade is a business model that aims at a direct trade relationship between the coffee grower and / or roasters, eliminating the so- called "negotiators", reducing operating costs and retaining the coffee farmer to the buyer(Counterculture Coffee, 2015). Thus, in the coffee market, paradoxically, there is a great demand for the consumption of specialty coffees, but the supply of quality grains which are produced in a sustainable manner is below the conventional market, despite its consumption of rapid growth, especially in developed countries.

The Waves Coffee: Direct Trade is most faced to specialty (and gourmet) coffees and also, presents in part, as an extension of coffee certification as FairTrade, RainForest and UTZ Certified, etc. but works in a short supply chain and more direct relationship between agents, as it is concerned with offering superior quality coffees, unique and exclusive, with the characteristic soft drink with high added value, with 'traceability' and sustainability, while certifications are concerned with numerous facets within the organizational structure of the coffee chain, such as training to improve coffee quality, optimization local infrastructure and the community as a whole, with school construction, support for workers, empowerment of coffee growers, gender equality, among other actions that make up the premises of certifications. To clarify further the results, Borrella, Mataix and Carrasco-Gallego (2015) and Guimarães (2016), explain the Waves Coffee. The first wave of coffee is attributed to the expressive increase and worldwide dissemination of beverage consumption, especially in the late nineteenth and early twentieth centuries. More specifically in the United States of America, this movement gained momentum with the Great Depression and World War II, requiring minimal time and effort in its preparation. (Reis, 2018; Guimarães, 2016). The second wave arises when, introducing the new concepts of roasting, in order to reach certain beverage profiles and the consistency of the supply, as well as new notions of origin, recognizing that this, at country level, influenced the quality and some characteristics of the grains (Andrade et al., 2015; Guimarães, 2016). The third wave appeared in the mid-90s, when only specialty coffees and grains of the Arabica species were used, as well as the vaporization of its numerous aromatic and flavor notes, highly influenced by its origin of production, Thus, coffee goes through a process of total "decommoditization", being considered as a complex, exclusive and seasonal product and compared to other specialty products (Reis, 2018).

The Direct Trade as the State of the Art of Supply Chain Coffee: The traditional Supply Chain Management (SCM) has many agents which are linked each other in the whole chain. Mentzer et al. (2001), infers that SCM can be understand as "the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole" Mentzer et al. (2001).
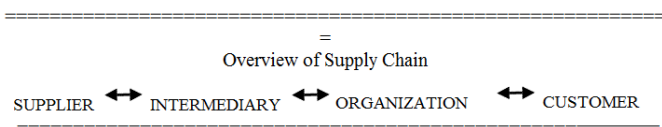

Figure 1. The Supply Chain – Mentzer et al (2001), adapted

Below, the figure 1 shows the complexity of SCM as a pipeline, proposed by Mentzer (2001). At this model it is clear that there are innumerable intermediary agents and in the coffee chain it is not different, being these intermediaries: cooperatives, associations, brokers, exporters, roasters and coffee shops.
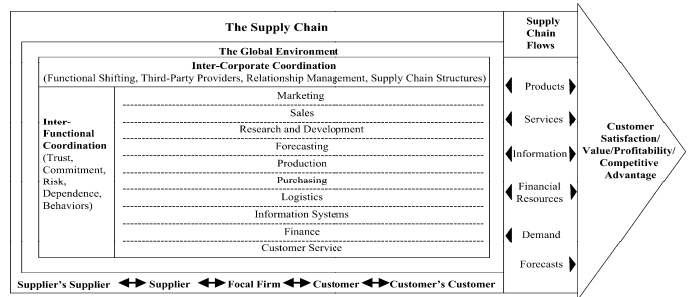

Figure 2. The traditional Supply Chain Extended – Mentzer et al (2001)

Severins (2015) infers that the traditional supply chain of coffee typically contains seven levels: growing, harvesting, hulling, drying and packing, bulking, blending and roasting. The entire SCM coffee is further extended by several intermediaries, including global transporters as well as exporters and retailers. The State of the Art of Direct Trade is how the whole chain is shorter and with this, the considerable reduction of costs with the intermediaries along the whole chain, which in turn, allows higher financial gains for the producers and coffee shops. For Badiyan- Eyford (2013), Direct Trade arises because of a strong tendency to offer quality coffees to the market with a close relationship between producers. For this type of trading, there are no pre-designed templates, nor standard terminology. Direct Trade presents itself as a relationship of stability, trust and equality between the roaster / cafeteria and the producer (Brown, 2012), which is increasingly valued and highlighted in the marketing of the final product. The actors in this chain would thus share their knowledge and work together in a coordinated way in order to optimize the supply chain, increase the quality and supply of specialty grains *or* beans, as well as "empower" coffee growers and, above all, reduce costs along the chain.

Assumptions of Transaction Cost Economics: In order to obtain an analysis of transactions between agents within a business network, or more specifically, in order to develop this research on coffee agribusiness, we have the Transaction Cost Economics. Transaction Cost Economics, also known as ECT, was developed by Ronald Coase in 1937, when it was published in The Nature of the Firm (Langlois, Foss, 1999, Thielmann, 2013). Silva Filho (2006) highlights the main factors in the transactions: (i) the limited rationality of agents, which prevents them from taking, over time, decisions that maximize well-being; (ii) the opportunistic behavior of the agents, which motivates them to act in order to obtain benefits at the expense of other agents with which they are related; (iii) the asymmetry of information, which implies unequal access of the agents to the information pertinent to the exchange made by them, preventing it from being given in the most advantageous manner from the point of view of society.

METHODOLOGY

For this research, it was characterized as qualitative with a descriptive-exploratory character and it was adopted the study of multiple cases, to understand the behaviors of the coffee agents that act in the direct form of commercialization and to explore what the risks and advantages in the relations between the agents (Labuschagne, 2003; Yin, 2014). In this way, an attempt was made to offer a description of the environment in which the agents are inserted and how their behaviors affect the structure of the chain of acquisition of coffee and the relationships with the coffee growers.

Case selection: Agents were chosen that act directly in the direct trade of coffee in each chain link. For this, a non-probabilistic sample was used as sampling (Yin, 2001). Sample convenience was used because, for Miles, Huberman and Saldãa (2013), such sampling is only targeted to agents that meet the requirements of the study in question. As this research aims to understand how agents act to reduce costs between buyers and sellers of coffees, known as chain intermediaries,

seven agents in total were interviewed. As it assumes that each agent via Direct Trade has a mutual relationship between each link in the chain, the focus on each was delimited in the search for possible asymmetries of information, opportunism of some agent or limited rationality of one or several agents. If any of these actions prevails between the negotiations, it will modify the structure and dynamics of direct trade, weaken mutual trust between the parties and strengthen opportunism.

INTERVIEWS

The interviews were semi-structured and have basic questions that are supported by theories and hypotheses that are interrelated to the research theme (Triviños, 1987, p.146). The interviews took place in Brazil and in the United States, among producers of specialty coffees, roasters and coffee shops. The choice of the seven interviewees is justified by the following considerations: a) search of the perspectives of the agents participating in the governance structures in the coffee chain; b) the need to understand the practices of international agents; c) to confront or find "gaps" between what is said and practiced among the agents; d) the search for the design of a non-active agent in the direct trade of coffee. These interviews allowed the agents' visions to be intercalated, generating results (or lack thereof) that could respond to the research objective in line with the theory of transaction costs.

Data collect: In this stage, Yin's (2001, p. 81) propositions that highlight how the interviewing skills for case studies: 21 questions were followed; knowing how to listen to the interviewees' positions, identifying the interviewee's keywords and effective components; to be flexible and make adaptations to better enjoy the moments of the interview; have extensive knowledge of the issues contained in the interview script and seek to be impartial during their performance. Initially, contact was established with some coffee shops, roasters, both in Brazil and abroad, and coffee growers from the southern region of the State of Minas Gerais, in order to conduct the interviews. The interviews were recorded and later transcribed in the data analysis stage. In addition to the recordings, annotations of topics considered were taken, and the reductions were made from larger sentences to smaller sentences until reaching the main points of the research (Miles, Huberman and Saldãa, 2013). There were seven interviews in all, with the managers, directors and coffee growers involved in the practice of Direct Trade Coffee. This stage was based on an elaborate interview script, considering the theoretical propositions of the Transaction Cost Economy and its impacts within the coffee supply chain.

Data analysis: For the analysis of the interviews, content analysis was used. Bardin (1977) defines content analysis as being a cluster of inter locution analysis techniques, aiming to obtain, through systematic and objective techniques of exposing the content of the messages, the inference of knowledge regarding the conditions of production or receptivity of such messages. This systematic should follow a sequence of procedures that cover pre-analysis, coding, categorization and inference. Thus, the data were compiled as follows: (i) Pre- analysis: Separation and identification of the interviewees; Separation by topic / subject from interviews; Capture of legend to identify the interviewees; (ii) Transcript of interviews; (iii) Encoding and categorization of interviewed agents: Organize and separate according to the subject of each respondent's related response - (Coffee producer= P; Roaster = T and C = Cafeteria <P1, P2, P3, P4, T1, C1, C2>); (v) Inference of the Thematic Analysis: Analyze the responses of the groups (intensity, frequency and meanings of the pertinent themes; (vi) Realization of the discussion of the results.

FINDINGS

This research has revealed a number of important points about the relationships between agents in the supply chain via Direct Trade. Access to information and transparency in negotiations and contracts are vital for reducing information asymmetry and the opportunistic

actions of agents outside of Direct Trade. Another very important point is the need to demystify that Direct Trade is a direct purchase and sale action between producer and cafeteria (or roaster). There will always be an intermediary within the chain, whether it is an exporter for buyers from other countries or an internal transport company sale made within the producing country. Thus, the structure of Direct Trade is lean (Figure 3), but does not completely eliminate the intermediates of the chain.
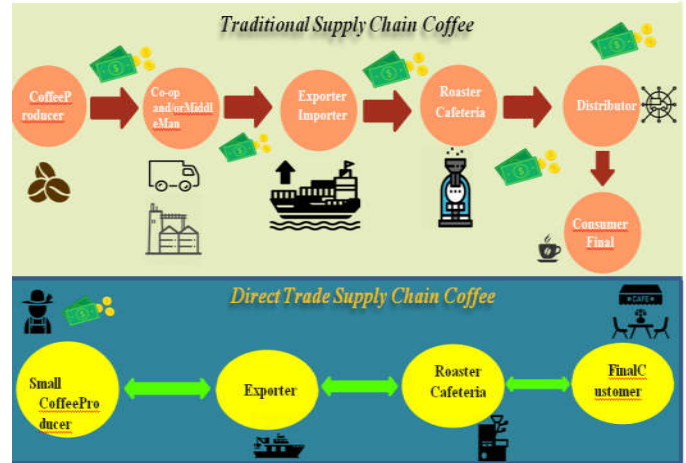

Figure 3. Traditional versus Direct Trade Coffee Supply Chain - By Authors

The Institutional Environment, of the transactions and the behaviors of the agents: It was observed that the transactions between the agents are not clear when asked about the expectations advocated by agents. While coffee shops have argued that coffee growers receive direct attention from their sponsors, such as trainings, support and / or technical visits on their farms, whether semi-annually or annually, coffee growers, in turn, have explained that obtaining the quality of their coffees is an action derived from its own dedications and the correct management of the coffee, without, necessarily, the intervention of some agent of the roaster or cafeteria.

Limited Rationale: It was observed that all Direct Trade agents interviewed are intended to be rational about their assignments within the specialty coffee chain; but it was noted that this rationality is achieved in a non-integral way, that is, it proves to be a limited rationality, which for Williamson (1989), such rationality is an intrinsic behavior to agents. The rationality of the interviewee P2 demonstrates the limitation on the possibilities or perspectives proposed by the Interviewee T1. Although they seem simplistic perspectives on the same theme, they generate asymmetries of information in the structure of governance and loopholes so that opportunism arises and modifies the entire organizational environment.

Opportunism: It can be explained that the main opportunistic behaviors reported among coffee growers were: restriction of information, concentration of access to new markets (for coffee resale); high rates of logistic payment for the outflow of production (paid more, besides the necessary, for not having competition) and mystification of the export processes.

Asymmetry of Information: It was unanimous among the interviewees P1, P2, P3 and P4 that they were unaware of the practices adopted by the roasters or coffee shops, regarding technical visits and support in the production processes of the specialty coffees to be sold to them. This is due to the fact that, while roasters and international coffee shops are proposing to offer support (in different ways) to their peers, one can see how many coffee growers do not even know of the possibility of winning an extra prize in their coffees and, above all, increase the networks of transactions between people who offer assistance to the coffee management and the more widespread, increase the transactions with the agents of the post-harvest, which, in turn, increase the risks of opportunism in the relations.

DISCUSSION

This research has brought significant contributions regarding the direct trade model of the direct trade model, which, in the coffee agribusiness, focused almost exclusively on the commercialization of specialty coffees, is still incipient its performance in the traditional market (commodity) or certified coffee, but in turn have shown an exponential growth in the last decades, requiring special attention to their growth. Thus, this research identified by the theory of Transaction Cost Economics (ECT) the existing gaps, in this almost unprecedented chain of direct coffee trade, in whose organizational environment the coffee grower and roaster, because they are distinct, either in the rational model, in the geographic environment, lead to a discrepant informational asymmetry between these agents, making it clear that, while coffee shops focus on the quality of their coffees sold, coffee growers do not demonstrate knowledge about the various 'resources' made available by roasters in this segment. The small coffee growers producing specialty coffees do not have certain information that would generate market advantages, since their rationalities are directed to the traditional coffee marketing model: 1) it produces; 2) benefits; 3) stock; 4) seeks buyers in the coffee market or sell to cooperatives; 5) sell coffee; 6) It pays the bills and what about is profit. This attitude offers the possibility of intermediaries accessing the chain and reselling specialty coffees to specific markets with a higher premium, but that is not (re) passed to the coffee grower, maintaining the same chain structure. As for the increase in sales in the international market, it should be pointed out that in view of the difficulties reported by coffee growers in reaching the external market by themselves, as a small-medium producer, it is believed that in the domestic market, it is easier to negotiate prices, , etc., for two reasons: (1) the ease of language (communication); (2) the growing public interest in higher quality coffees (or better sensitization). The rationale for coffee export processes, as previously reported, corroborated (or corroborated), to a certain extent, the growth of the domestic market in the consumption of specialty coffees.

CONCLUSIONS

Although studies on Direct Trade in coffee agribusiness have grown in recent decades, especially in the last few years linked to research on the Third Wave, which is focused on specialty coffees, there are few studies that seek to understand this chain of direct trade as a whole.

In this way, it is possible to infer, albeit prematurely, that Direct Trade is an extension of certification, concerned with offering superior, unique and exclusive quality coffees with the characteristic soft drink with high added value, traceability and sustainability, while certifications are concerned with numerous facets within the organizational structure of the coffee chain, such as training to improve coffee quality, optimization of local infrastructure and the community as a whole, building schools, support workers, empowering coffee farmers, equality between genders, among other.

In this way, this work can be glimpsed by the theory of the Economy of the Costs of Transaction in which Direct Trade allows a structure of governance leaner than the traditional coffee agribusiness chain; reduces opportunistic actions when the information asymmetry is small, that is, when there is an efficient bilateral relationship and broadening the rationality of the agents regarding the possibilities of gains among the agents.

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