Coffee: one product, two governance types

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Abstract

The supply chain of a product historically may converge to one main type of governance, but eventually forces inside or outside the supply chain can be strong enough to forge a new type of governance. It was found in this research that in the London coffee business two very different supply chain governance types are able to coexist in order to supply the market. One can be characterized as market type of governance and the other one is a relational type of governance.

Keywords: supply chain governance, coffee supply

INTRODUCTION

In physics a system can be in equilibrium when the forces that are acting on it are in balance and there is no resultant change. In the organizational world, in a direct analogy with a physical system, we can find a situation where opposing forces or factors balance each other out and stability is achieved. It is possible to find systems in equilibrium at the level of organizations, industries, local markets, national markets and global markets. It is also possible to find systems

in equilibrium in supply chains. To characterize a system in equilibrium can be interesting, but it can be even more interesting to characterize a system that is losing its balance and is in process of changing or disequilibrium. The supply chain of coffee offers an interesting opportunity to apply this analogy, since it is a system that is changing after a long period of stability.

The analysis of Supply Chains (SC) received a positive contribution when (Gereffi, Humphrey, & Sturgeon, 2005) created a new typology for the governance of supply chains. The new theoretical construct, which was largely based on transaction costs economics, production networks and firm technical capabilities, proposed the existence of five main types of value chain governance: (a) market; (b) modular; (c) relational; (d) captive and (e) hierarchy. According to the model, the interaction of the variables such as complexity of transactions, ability to codify transactions and the technical capabilities of the supply base would have the power to define the governance type of a value chain (Cattaneo, Gereffi, & Staritz, 2010; Gereffi et al., 2005).

The concept of governance of supply chains has evolved as it was employed to study corporate social responsibility (CSR) in global value chains (Andersen & Skjoett-Larsen, 2009), green supply chain management (Tachizawa & Gimenez, 2010), the internationalization process of organizations that are part of a global value chain (Chiarvesio & Maria, 2009), and the study of a supply chain networks in a changing environment (Macchion, Danese, & Vinelli, 2015). This diversity of employment of the value chain governance concept indicates how rich it is as a construct. Few authors, however employed the lens of this theoretical typology to analyze the very moment when a supply chain changes from one predominant governance type to a different one, or when a new value chain governance type makes its appearance in a specific industry.

It was recognized by (Gereffi et al., 2005) that a governance type which predominates in an industry can evolve over time. Four different industries (bicycles, apparel, fresh produce and electronics) were used by the authors as examples of change. Despite the fact that four cases were employed to show that a change in the governance type can happen, the authors did not discuss more deeply about how the change can happen. To clarify this issue, it will be important to better understand how the governance of a value chain can also reach a dynamic equilibrium and how this equilibrium can give space for a new arrangement.

RESEARCH QUESTIONS AND METHODS

The primary objective of this article is to contribute to the discussions about the conceptual framework developed by Gereffi et al.(2005) with the aim to analyze the governance of value chains. In other words, it aims to help to better explain how the governance of a value chain can change over time. In order to accomplish this, the article makes use of contextual case studies in the coffee business.

To reach the main objective it is necessary to answer the following research questions:

- What is the value chain governance type that predominates in the coffee industry;

- How can the main variables that are determinants for this value chain governance type be characterized?
- Is there any alternative value chain governance type?
- How can the main variables that are determinant for this alternative value chain be characterized?
- Is it possible to identify the variables that are affecting any structural modifications in the value chain governance type?

To answer these questions multiple case studies were conducted at the final end of the coffee supply chain. It is important to emphasize that the coffee business was chosen because it is composed of vast networks of production and consumption which link many parts of the developing world to the developed world (Crisis, Fair, Small-, & Bacon, 2004; Muradian & Pelupessy, 2005; Ruben & Zuniga, 2011). The field work for this study was conducted in London since it a city with a high income market that has influence on setting consumption trends.

Case study protocols were established as a focus for this research study. The protocols included the observation sequence for the initial visit and the guidance structure for the interviews (Stuart, McCutcheon, Handfield, McLachlin, & Samson, 2002). Since this article aims to add to the discussions for the refinement of a theory, descriptions of the different cases were organized. The primary case entities selected were independent coffee shops in central London, which were chosen on the basis of the following criteria:

- Specialty coffee shops as indicated by the specialized press in London;
- Conventional coffee shops localized in the same geographical area as the selected specialty coffee shops;
- The coffee roasters which provide coffee for the selected specialty coffee shops;
- The coffee roasters which provide coffee for the conventional coffee shops.

The selection of the providers of roasted coffee for both specialty coffee shops and conventional coffee shops followed the snowball technique to identify possible interviewees, in other words they were appointed by the interviewees at the different coffee shops.

The fieldwork was performed in London from March to April 2014. All data gathered at the coffee shops followed the same protocol. The first step in the process consisted of a visit to the coffee shop. An observation sequence helped to identify if the coffee shop could be categorized as a conventional coffee shop or as specialty coffee shop. After the sequence of observation and the registration of the data, the store manager would be contacted and would be asked to conduct an interview. From a total of 27 visits, it was possible to interview 16 store managers or head coffee buyers, 8 of the interviewees were from specialty coffee shops and remaining 8 were from conventional coffee shops at vicinity of the selected specialty coffee shops.

There was also an intermediary stage of the fieldwork in which the data obtained from the coffee shops was processed and the individual cases were described. This initial review of the data helped to organize the second stage of the research, this time with coffee roasters. It was possible

to do 7 interviews with coffee roasters which supply the London market, from this total, 3 were suppliers of conventional coffees and 4 were suppliers of specialty coffees.

RESULTS: SPECIALTY COFFEE SHOPS AND THEIR SUPPLIERS

The guided observation of the independent specialty coffee shops, helped to identify the main characteristics that are common to these stores. Table 1 presents these characteristics and also brings some explanation about why they have these characteristics.

Table 1 – Characteristics of specialty coffee shops

Attributes	Attribute meaning
It sells only specialty coffees.	Specialty coffee is a category of coffee which reaches higher punctuation in a sensorial analysis evaluation scale.
Coffee is the main product at the coffee shop.	The identity of the coffee shop is given by its coffee preparation and related services. The food activities and the other services are just a complement to the coffee related services.
There is a barista fully dedicated to the coffee preparation and to the coffee related activities.	Barista is the professional fully trained to deal mainly with specialty coffees (selection, purchase, preparation, supervision and advice).
The origins of the different coffees being sold are fully identified.	Different geographical regions are able to influence in the main sensorial attributes of the coffees. Some geographical origins are perceived to add very favorable attributes.
The coffee shop promotes the culture of higher quality coffee consumption	To drink higher quality coffee is a culture that is evolving in the world, it parts from the belief that some groups of coffees have higher quality attributes.

It is important to highlight that specialty coffee shops (third wave coffee shops) are positioned as a higher quality alternative to traditional coffee shops. The dissemination of this category of stores is based on an important market shift in the coffee business. A significant portion of customers are willing to drink specialty coffees and pay more for this experience (Carvalho et al., 2016). The Specialty Coffee Association of America (SCAA) is one industry association which developed precise protocols to perform sensorial analysis of coffee and according to these protocols, we can refer to *specialty coffee* if the coffee beans reach a punctuation of 80 or above in a sensorial evaluation scale (SCAA, 2009).

It just so happens that the specifications for specialty coffee cannot be fully stated, since each specialty coffee is evaluated for its distinct and individual characteristics (Wilson & Wilson, 2014).

These characteristics are reached by the coffee growing conditions, climate and post-harvest processing. The optimal or ideal combination of agricultural practices, soil, altitude, climate and post-harvest processing are relatively rare, making it difficult to find a reliable source of specialty coffee (Pedergrast, 2010). Due to this reasoning, specialty coffee shops, tend to dedicate more attention to their supply of coffee.

All the interviews with specialty coffee shop managers revealed that they do maintain a close relationship with their suppliers of roasted coffee. It was revealed that a continuous supply of fresh roasted coffee is needed throughout the entire year in order to maintain the higher standards of quality. Since achieving the optimal attributes of specialty coffee is relatively rare, and since their specification cannot be fully stated, the relationships between coffee suppliers become strategic for the coffee-shops. The relationship between the dyad coffee shops/coffee roasters leaves the condition of simple market type transactions and becomes a long-term administered relationship.

The interviews with roasters of specialty coffee and also the interviews with the managers and head buyers of the coffee shops revealed that two sides of the dyad share tacit information about market trends, technological shifts within the industry, and information about the direct interaction with final customers or end-users. The interviews with the same groups also made it clear that, apart from coffee the specialized roasters also provide distinct services to their clients. Some of the primary services provided include: coffee preparation machine maintenance, in house staff training about coffee preparation, and courses about coffee preparation and sensorial evaluation of coffee. Above all, when the specialty coffee roasters provide detailed information about the coffee that is being sold, the information made available include the coffee origin and variety, production conditions, harvesting and post-harvesting processing, environment protection strategies, labor protection conditions and coffee trade conditions. All this information is perceived as very valuable for the coffee shops owners and managers since they are in a better position to instruct their final clients about the coffee being served.

It also became clear from the interviews with both sides of the dyad that specialty coffee roasters and the staff of the specialty coffee shops share the same ambition about raising the standards of the coffee being offered to a very knowledgeable client. Moreover, both sides want to expand and maintain their information about the culture of consumption of higher quality coffee. All these characteristics help to classify the governance type for the specialty coffee as relational value chain governance.

RESULTS: TRADITIONAL COFFEE SHOPS AND THEIR SUPPLIERS

The guided observation of the traditional coffee shops in London revealed a different scenario and the main characteristics are presented in Table 2.

Table 2 – Characteristics of traditional coffee shops

Attributes	Attribute meaning
It sells mainly traditional coffees.	Traditional coffees, in most of the cases, are industrial blends of coffee, which are composed by coffees from different origins. The objective of a blend is to obtain a standardized product.
Coffee is not the main product at the coffee shop.	Coffee is mainly a side to food products.
There is no barista fully dedicated to the coffee preparation and to the coffee related activities.	In most of the cases, several members of the staff are entitled to prepare the coffee.
The origins of the different coffees being sold are not identified.	The different blends receive nonspecific names, making it difficult to identify the different origins of coffee that are composing the blend.
The coffee shop is indifferent to the culture of higher quality coffee consumption	To offer a standard product for an affordable price is one of the main strategies of the coffee shops.

Traditional and independent coffee-shops (which are predominant) tend to evolve organically and to adapt to the local taste, the daily interaction with the clientele which helps to shape the store format, and in terms of the products and services offered. The different industrial blends of coffee are provided by local or national coffee roasters. This category of *roasted coffee* is virtually unlimited, since it is always possible to change the composition of the blend in order obtain similar outcomes. In most of the cases the different coffees that are components of the blend are not disclosed, making it easier for the coffee roaster to always change the blend to their convenience (Alvarez, Pilbeam, & Wilding, 2010; Ruben & Zuniga, 1996; Wilson & Wilson, 2014).

The problem of serving coffee blends is that they are not truly embodying specific characteristics of a geographical region, they are not available in limited quantities and they are not regarded as specialty coffee according to the SCAA criteria (SCAA, 2009). It is also important to say that it is not possible to tell a story about a coffee blend to the client mainly because the staff of the coffee shop does not really receive credible and detailed information about the coffee blend. It is virtually impossible to guarantee the true origins of the components of the blend.

All of these characteristics make it possible to easily change from one provider of coffee to another provider of traditional coffee blends, since most of these group of coffee roasters use similar criteria do compose their coffee blends. It can be said that the complexity of information exchanged between traditional coffee shops and their providers of coffee is very low. It is also clear that there is no mutual dependence between coffee shop buyers and the roasters of traditional coffee blends. Due to these characteristics of transactions, the value chain of the industrial coffee blends can be called market type value chain governance.

CONCLUSIONS, THEORETICAL OUTCOMES AND FUTURE WORK

With the results found in this qualitative study, it is possible to indicate answers to the posed research questions. In the London market for coffee, traditional schemes of trade based on market type governance value chains are still predominate. In this type of chain governance, industrial coffee blends are easily replicable, making it easy for both coffee buyers and coffee suppliers to exchange partnerships. In such a governance type, it will be naturally difficult to implement effective coordination mechanisms between buyers and sellers. It is also important to remember that the lowering of negotiated prices becomes important for this type of coordination.

The obtained data also indicated the existence of one alternative scheme of coffee trade, in this case the commerce and consumption of specialty coffee. For this category of product an alternative type of chain governance emerged. Different from the industrial coffee blends, specialty coffee is not easily replaceable, this come from the fact that specialty coffee is less abundant and will come from sources that are not easily accessed. In order to offer a high quality coffee, specialized coffee shops will need to cultivate relationships with suppliers that are able to find and provide this category of products. The relational value chain governance will naturally appear under such conditions.

Figure 1 depicts what was observed in the London coffee market. The axis A represents the forces operating on the market type value chain (industrial coffee blends). As can be seen in any dynamic equilibrium there are opposing forces. The forces that lead to cost reduction are bigger than the forces that lead in the direction of quality improvement. The axis B represents the forces operating on the relational value chain (specialty coffees). In this case the forces that lead to quality improvement are bigger than the forces that lead to cost reduction. The final result is that market type value chain tend to get more and more distant from the relational type value chain. Unless the resulting forces in each system change, the coffee will be keep being traded in at least two distinct governance types.
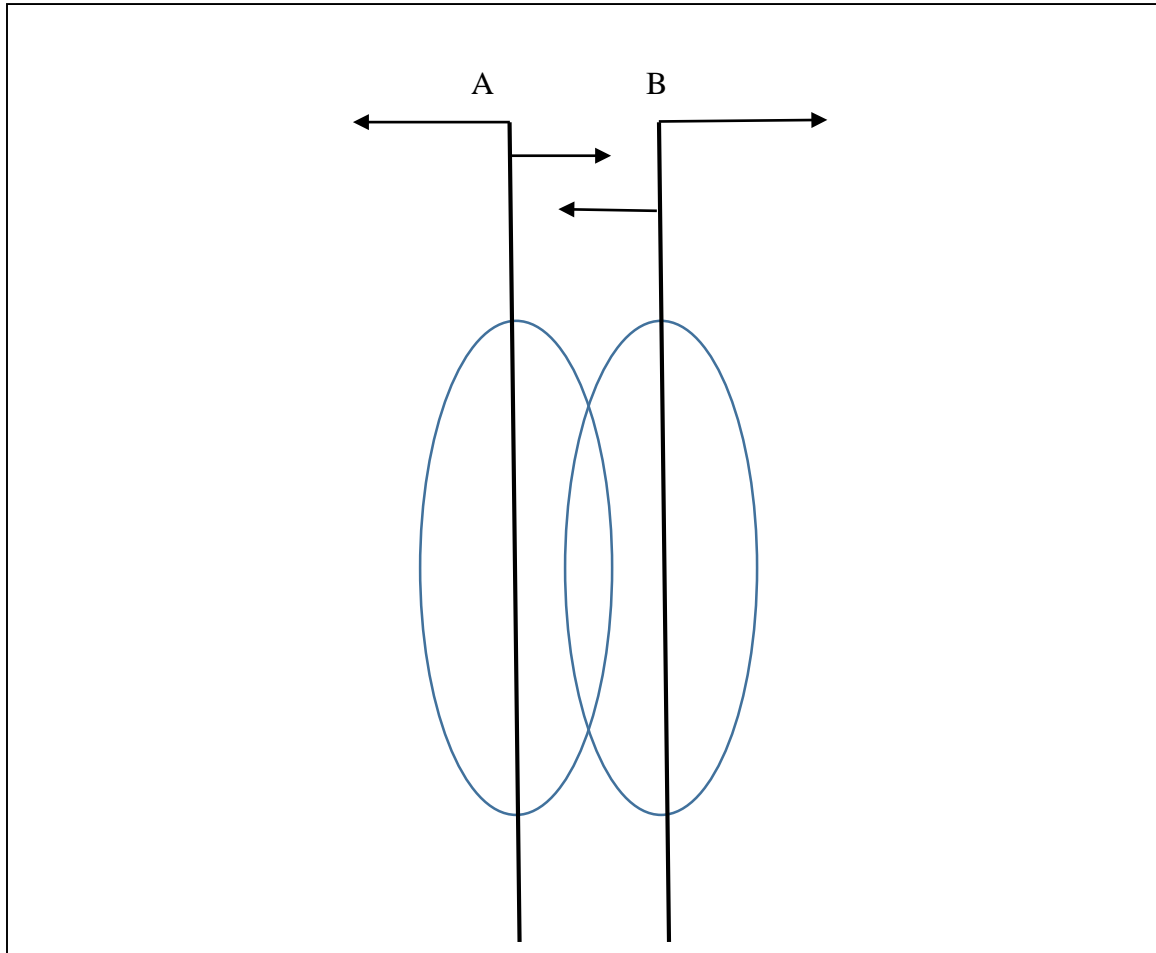
Figure 1 – Operating Forces Impacting Industrial Coffee Blends (A) vs. Specialty Coffee (B)

It is important to highlight that this qualitative empirical study only attempts to explain why it is possible to find two distinct governance types of transaction for the same product. The scheme presented in Figure 1 only attempts to represent some of the forces operating in the London coffee market. It is possible to develop a more precise model in which it would be necessary to:

- Identify the forces operating in a system of organizations;
- Determine the direction of these forces;
- Determine their intensity;
- Construction of a mathematical model capable of representing systems in equilibrium or in a changing process;
- Use the model to explain dynamic systems and to predict change.

The analogy with physics is evident, but the real challenge would be to find ways to quantify the forces in a system composed by organizations or supply chains.

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