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# Exploring Possibilities of Implmenting A "Long-Short" Supply Chain Within The Fair Trade Sector With Blockchain Technology

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# ABSTRACT

The fair trade approach offers a model for changing production and consumption patterns, but has always been a niche market and is currently suffering from overproduction, insofar as not all production produced under fair trade schemes finds takers in this specific market. With the implementation of blockchain technology (BCT) in fair trade supply chains, the question is if it is possible to (re)create the link (or to emphasize the existing one) between fair trade producers and consumers, even if there are many intermediaries and long geographical distances between them. With a literature review to explore the expectations of consumers on fair trade products and a case study in Bolivia to explore possibilities to provide information on production and producers from the point of origin, this research focuses on the possibilities of using BCT to link both ends of the supply chain within the fair trade sector.

Keywords: Quinoa; information asymmetry; consumer; fair-trade

# 1 Introduction

The focal point of the fair trade framework has traditionally been the small-scale producers from the Global South, with the primary goal being the improvement of their living conditions. This is achieved by setting minimum prices for products, ensuring that fair trade prices typically surpass market prices, thereby benefiting the producers. Nowadays, other objectives such as organic production are also incorporated into the fair trade schema. For instance, in France, approximately 88% of fair trade agricultural products are also certified as organic (Observatoire du Commerce Equitable, 2022), while in Germany, this figure stands at around 72% (Hauff and Claus, 2018, p. 124). This correlation implies that agricultural fair trade products can be essentially classified as organic products.

#### 1.1 Blockchain and fair trade

In the field of agriculture products, the implementation of BCT has started to be analyzed in the scientific literature for some years, but in the field of fair trade, the possibilities of "linking" the producers to the consumers through BCT have not yet been deeply explored. As a consequence, this extended abstract focuses on the potential applications of BCT within supply chains to either establish or reinforce connections between fair trade producers in the Global South and consumers in the Global North. This is particularly relevant in scenarios involving numerous intermediaries and considerable geographical distances. Research across various databases available to the author (EBSCO, Crain, and ProQuest) specifically examining the intersection of blockchain and "fair trade" within articles published in journals ranked by the *Fondation Nationale pour l'Enseignement de la Gestion des Entreprises* (FNEGE) (as of the 2022 ranking), up until the end of 2022, revealed only one relevant result. This singular finding pertained to an article by Dionysis et al. (2022), focusing on consumer buying intentions.

BCT offers decentralized storage capabilities, guaranteeing the immutability of information throughout the entire network. Initially emerging in the financial sector and formulated by the mysterious Nakamoto in 2008

as a response to the financial crisis, BCT introduces a decentralized storage system that ensures information immutability across the network. Unlike conventional databases where data and transactions are stored on a central server, BCT distributes this information across all servers/computers within the network of participating members, functioning similarly to a public ledger. This decentralized characteristic of blockchain, contrasting with traditional centralized databases, provides a distinct advantage in terms of data security and the establishment of trust. The reinforcement of confidence in the stored information, facilitated by immutability, is a pivotal attribute within the context of fair trade. The incorporation of BCT in supply chains underscores the significance of traceability, as emphasized by Hasting and Sodhi (2019). This importance is underlined by Voshmgir (2016), who asserts that, particularly in distribution channels, BCT offers various advantages, with heightened transparency and traceability standing out as the primary benefits within supply chains. Indeed, BCT enables improved traceability and transparency of the product and can provide more information on the origin and attributes of the product (Thiruchelvam et al., 2018). Consequently, the product's origin can be retraced, and pertinent information, including its attributes and organic features, can be recorded on the blockchain (Bai et al., 2022). Crucially, blockchain also addresses information asymmetry in supply chains (Wu and Yu, 2022), a vital aspect within the framework of fair trade. In essence, the foundational concept of traceability in supply chains based on BCT aligns seamlessly with fair trade objectives, delivering benefits such as improved transparency and traceability in supply chains, along with the elimination of information asymmetry. As information asymmetry can influence trust between stakeholders (Akerlof, 1970), the focus of this research is also to explore how BCT can be used to reinforce confidence (or trust) by providing transparent and verifiable information, including production, certifications, and fair trade prices. However, even if the implementation of BCT in fair trade supply chains holds the potential to be a game changer by furnishing intrinsic information about product characteristics, and fostering a more direct and trustworthy connection between producers and consumers, it has to be noted that the implementation of BCT within agricultural supply chains has also encountered certain difficulties in recent years such as a lack of control over the information entered into the system (Chen et al., 2021), challenges to system access for informal players (Ali et al., 2021; Rana et al., 2021), complex large-scale implementation (Kouhizadeh et al., 2021), the emergence of different databases for different players (Chen et al., 2021) or a lack of interoperability between different systems (Tsolakis et al., 2022).

# **1.2** The elaboration of the notion of a "long-short" supply chain

Unlike in a short supply chain, in which a kind of personal or direct link between producer and end consumer can be assumed, the consumers of fair trade products in the Global North have no direct link with the producers in the Global South. Indeed, according to Dekhili et al. (2017), end consumers do not necessarily project themselves as partners in the exchange and this may come from the fact that they imagine fair trade channels as being quite long (i.e. that the consumers are far away from the small producers). Consequently, it might be interesting to explore the possibilities of "shortening" this geographical distance by enabling better traceability and, to a certain extent, more transparency in the supply chain of a fair trade product produced in the Global South and consumed in the Global North. More precisely, the idea is to explore possibilities in implementing BCT to fair trade supply chains in order the create a "long-short" supply chain using the unique possibilities offered by BCT. In other words, within the fair trade business sector, explore the possibilities to create a link between the producers and the final consumer through greater traceability and transparency. In the current analysis, this is enabled by what can be called a "long-short" supply chain as long supply chains will incorporate attributes from a short supply chain as the BCT can enable this "shortening" of the supply chain even on longer geographic distances and with many intermediaries.

# 1.3 Environment of the case study in Bolivia

The case study of this study is centered on the production of quinoa real in the Andean Plateaus of Bolivia. The production area for the so-called quinoa real is situated at an elevation of approximately 4,000 meters above sea level, within the region of the salt desert of Coipasa and Uyuni. The choice of Bolivia and its quinoa real as the subject was driven by the Bolivian government's political initiative to cultivate the niche market for quinoa real by incorporating a designation of origin chain. This designation of origin is conferred upon a product recognized as unique due to specific attributes, including factors such as land, topography, climate, water, and human influences, collectively defining a distinct geographic origin. The Bolivian quinoa real distinguishes itself as a unique product cultivated in a predominantly dry and cold climate year-round, with the rainy season occurring only from December to March. The main business location is the city of Challapata, also known as the capital of quinoa.

# 2 Methods

To investigate the feasibility of connecting Global South producers with Global North consumers in the fair

trade business through the application of BCT, two distinct research methods were employed. Initially, a comprehensive literature review was undertaken to understand the attitudes and expectations of Global North consumers towards fair trade products and the fair trade business as a whole. Subsequently, a case study was conducted at the production level to assess the possibilities of augmenting traceability and transparency from the beginning of the production process in a framework where the BCT is not implemented for traceability and transparency purposes (or for any other applications). This combined approach aimed to provide a holistic understanding of both consumer perspectives and on-the-ground production dynamics within the fair trade framework.

In conducting the literature review on consumers in the Global North, a meticulous process was employed, leading to the identification and examination of 40 relevant papers. The selection criteria involved scouring the databases ProQuest, Crain, and EBSCO, utilizing key terms "fair trade" and "consumer" in either French or English. Additionally, chosen articles were published in journals ranked by the French FNEGE, using the 2019 version of its ranking, and those published between 2009 and 2020. Upon the identification of the initial set of papers, a thorough screening process ensued. Duplicated papers were excluded, and each article's title, summary, and keywords were scrutinized to ascertain a direct connection to fair trade. Articles lacking such a link were eliminated, followed by a subsequent examination to determine if they exhibited a connection to consumer-related subjects, and were also eliminated if such a link was missing. After these steps, 45 articles persisted from an initial pool of 1,821 results combined from all databases. The remaining 45 articles underwent careful readings to ensure a comprehensive understanding. Five articles were subsequently discarded during this phase, as they ultimately lacked relevance to the research subject. Within the finalized set of 40 papers, information concerning consumers and fair trade products, sourced from both primary and secondary references within the articles, was meticulously extracted and organized into a table. Multiple readings of the selected papers were undertaken to identify overlooking critical elements. Subsequently, a qualitative content analysis (Bardin, 2013) was conducted based on the compiled table, with outcomes categorized into thematic groups. Noteworthy themes that emerged included the purchasing obstacles faced by consumers confronted with fair trade products, the underlying criteria influencing consumer attitudes toward such products, and the expectations consumers harbor regarding the attributes of fair trade products. Moreover, the analysis, rooted in a considerable number of marketing studies, unveiled prominent marketing strategies for fair trade products. This exhaustive process not only synthesized a comprehensive understanding of the literature but also shed light on nuanced aspects of consumer behavior and expectations in the context of fair trade.

After the literature review, a case study (Yin, 2014) was conducted through two field studies in the highlands of Bolivia to explore the possibilities of increasing the traceability and transparency of the products. The focus of this study is on what is referred to in logistics as being the first km, i.e. the first stages of the production process or also as from farm to factory.

The two field studies on the Andean Plateaus of Bolivia were carried out between April and June of 2021 with organic and fair trade quinoa real producers. The first exploratory mission in April 2021 consisted of exploring the terrain and testing the producer questionnaire. More precisely, the first mission consisted of exploring the quinoa real production region and interviewing some producers encountered in the field while driving around in the region. The producers were open to the questions, but it soon became clear that the questionnaire was too complex (e.g. lack of understanding of the concept of "traceability") and that the individual interview approach was not feasible due to a lack of time for producers. This first mission was also the occasion to forge links with the *Asociación Nacional de Productores de Quinoa* (ANAPQUI) which manages and groups together various groups of producers of fair trade and organic quinoa real. This association divided the production region into nine districts and has technical experts in each of these districts to help the producers in their quinoa production and also to keep records about the expected production capacities and the final production of producers. They also manage the community warehouses at the district level and are a kind of intermediary between the producers and the management structure of ANAPAQUI.

The second, more in-depth field mission took place in June 2021. This second field mission enabled a deeper understanding of the current processes in organic and fair trade quinoa real through four different approaches. Firstly, an extended discussion took place with the logistics manager of ANAPQUI where the current logistical processes were described and documents for further analysis were provided. Secondly, non-participant observations were carried out at different farmers' locations and at the first warehouse at the district level (the farmers were members of the ANAPQUI Association and the warehouse belonged to the ANAPQUI Association).

Thirdly, the second field mission was also the opportunity to hold two focus group interviews (Krueger and Casey, 2009) with producer groups and one group discussion with the local technical experts from ANAPQUI.

The local technical experts are usually based in each quinoa-producing district but came together in Callapata for a staff meeting. The producer focus groups were conducted in the districts of *Mira Flores* and *Cala Coa* with the help of ANAPQUI, each consisting of nine quinoa producers. Each session lasted between 15 and 30 minutes, a duration set to accommodate time constraints for producers. Before the focus groups with producers, a longer group discussion (about one hour) was held with the technical experts from ANAPQUI, serving as a preparatory phase in order to explain more deeply the objectives of the research. In both the producer focus groups, a technical assistant served as a co-moderator role during discussions, while the primary moderator role was assumed by the author of this current paper. The technical advisors were of help during the focus groups with the producers and regularly intervened in the focus group discussions to clarify questions or to stimulate answers, but never answered in the place of a producer. All group discussions and focus group sessions were video-recorded, and transcribed by the author for subsequent coding and analysis. The second field mission also provided an opportunity to visit the ANAPQUI factory in the city of Challapata in order to understand and analyze the processes of storage and transformation of quinoa at the factory level.

# 3 Results

#### 3.1 Analysis of the literature review

The content analysis of the literature review reveals four primary factors that discourage the purchase of fair trade products. Unsurprisingly, the higher price of fair trade products compared to standard or conventional products stands out as a crucial determinant discouraging consumers from opting for fair trade. Secondly, a prevailing skepticism toward fair trade exists, predominantly rooted in a lack of information, particularly regarding the precise amount or percentage of the final price benefiting the producer. Thirdly, there's a widespread lack of understanding about the definition of fair trade, with some consumers unfamiliar with its concept, origin, purpose, and values. Finally, a notable lack of identification with the fair trade concept and/or producers in the Global South prevails, with producers perceived as distant and disconnected from consumers in the Global North.

On the other hand, the (social) engagement level of consumers plays a significant role and is a recurring theme in the literature. Sometimes, it's not merely the product or the necessity driving the purchase, but rather the adherence to the fair trade approach. In essence, showing interest in the fair trade concept increases the likelihood of buying a fair trade product, even if it carries a higher price.

Examining expectations for fair trade products, consumers hold several key criteria. Trust is paramount - a product's credibility regarding fair trade claims is crucial for converting buying intentions into actual purchases. Trust also plays a vital role in the relationship between consumers and other stakeholders in the fair trade supply chain. Additionally, consumers seek well-documented information that is easily understandable, valuing quality over quantity. Furthermore, they desire traceability, i.e. they want to know the (exact) origins of the fair trade product.

#### 3.2 Description of the different field observations

The technical supervisors from ANAPQUI support the affiliated producers during the whole production cycle starting with the preparation of the soil, but also ensure some control activities in identifying the plots for organic and fair trade quinoa real production and in estimating the expected harvest (to avoid future cheating by the producers in handing in more quinoa real than initially estimated). These steps were not physically observed but are part of the current analysis. The practical on-field observation phase starts once the quinoa real is harvested and available at the producer's locations.

The process is as follows after harvesting. First, the organic and fair-traded quinoa has to be stored at farmers' level in bags (of about 50 kg) in a clean location (for example a garage or whatever other building) where there is no possible mixture with quinoa that has been produced conventionally (i.e. with pesticides). This place must enable the possibility to be closed as it will be sealed once the samples for the control of organic production have been taken. To assess the organic quality control test, laboratory assistants from ANAPQUI take a sample of each bag at the producer's place and mix all samples of quinoa grains into one plastic bag that is named, numbered (so it can be associated with the producer) and sealed in order to be isolated from the samples of the others producers. This sample (together with other bags containing samples from other producers) is then sent via a logistic provider such as FedEx or DHL Express to a laboratory outside of Bolivia (in general France or Peru) where all the samples are then analyzed for their organic production. If the test results reveal the presence of pesticides, the entire production is disqualified from maintaining its organic status, and the farmer is consequently excluded from ANAPQUI's organic production scheme for a minimum period of three years. On the contrary, if the results indicate the absence of pesticides, the process is permitted to advance. In that case, the harvest is transported from the producer's location to the

community warehouse of the district. This step was not observed but based on the discussion with the logistics manager of ANAPQUI, the documents provided that enable traceability (and later payment of the producers), and the explanations from the local technicians of ANAPQUI, the process from the producer locations to the community warehouse can also be clearly described and used for analysis.

In the community warehouse, the quinoa real bags of each producer are put in a specific place ensuring that they are not mixed with the harvest of the other producers. Also, the warehouse is looked and only the technical expert has the keys. For the entry process of the bags into the warehouse, paper-based documents such as receipts are used. Once there is a significant amount of quinoa real in the warehouse (i.e. enough for one full truckload), a truck is sent by ANAPQUI, and bags are transported to the ANAPQUI factory at the border of the city of Challapata for further processing. At the factory, the whole quinoa real is transferred into silos which are directly linked to the factory.

The next steps within the factory were observed, but no photos were allowed to be taken<sup>1</sup>. Different processing steps are happening within the factory. Arriving from the silo into the factory, the quinoa grains are washed to get rid of the saponins<sup>2</sup> that are located on the outside of the quinoa seeds. After having been dried by a machine, the seeds are also classified by color (red, white, and black) and by size with specific machines. Once all steps are completed the quinoa grains are packed in bags of 50 kg and are ready to be transported to the client for further processing steps such as repacking for instance. At this stage of the current process, the harvest from different producers and different districts can be mixed, which is usual for grain products from silos (Pullmann & Wu, 2012, p. 710). The observation part did not go further than that step. Figure 1 gives an overview of the physical flow of the quinoa real from the plot to the exit of the processing plant of Challapata.





#### 3.3 Analysis of the current processes

In the analysis of the organic and fair trade quinoa real production at the producer level, it has to be noted that the current process is well documented and traceability is ensured to a certain extent, but all is based on paperwork. Indeed, the in-depth discussion with the logistics manager and the documents provided gave

<sup>&</sup>lt;sup>1</sup> To get idea of the production process, it is possible to watch the YouTube video called "Planta Challapata – Primera fasse de producción ANAPQUI" and available at ANAPQUIs website under <u>https://anapqui.org.bo/denominacion-de-origen/sistema-de-trazabilidad-y-control-de-calidad</u> (last access on website on 23rd September 2023)

 $<sup>^2</sup>$  Saponins are bitter in taste and also produce foam so that they are not desirable for the human consumption

profound insights into the current logistical traceability scheme. All current recordings are done on paper and backward traceability is very time-consuming according to the logistic manager of ANAPQUI. Indeed, if such a request is formulated by an international fair trade organization that buys the quinoa real from ANAPQUI, it can take up to several weeks to formulate the reply as a lot of time is needed to gather all relevant documents from the field and analyze them to check the requested information. The paper documentation on the field starts with the documents that are available at the producer level where all quinoa plots are for example registered. Also, once the quinoa bags, after organic control, are transferred from the producer to the community warehouse, this transaction is recorded: the producer receives a receipt about the quantity that is delivered, and the technical expert, in charge of receiving the quinoa, keeps paper-based records about the whole quantities of quinoa within the warehouse and from which producers to come from.

#### 3.4 Analysis of the focus groups with producers

Concerning the analysis of the focus groups at the producers' level, it has, first of all, to be stated that the producers are strongly in favor of end consumers being able to trace the exact location of the product so that the end consumers can know where the quinoa comes from, not least because they hope to increase demand and therefore the price. Regarding the price paid in June 2021, it appears that the fair trade price paid for the product by ANAPQUI to his producers is a source of unhappiness on their side (examples of verbatim, translated from Spanish: "we are currently not satisfied with the price", "the most important for us is the price").

Secondly, the focus groups at the producer level revealed that the producers do not know their end customers but that they would like, for example, to communicate the qualities of the product to give greater confidence to the end consumer. An analysis of the messages conveyed by the producers in the focus groups revealed that they would like to emphasize two elements for the final consumer. Firstly, the quality of their organic product (examples of verbatim, translated from Spanish: "*we produce a quality product*", "*our quinoa seeds are bigger*") and second the effort they put into producing organic and fair trade quinoa real, as it requires greater effort than conventional production sold at market prices to bigger intermediaries (examples of verbatim, translated from Spanish: "*we use natural fertilizers*").

# 4 Conclusions

Concerning the outcomes of consumers' expectations regarding fair trade products, there is a pressing need to provide final consumers with more comprehensive information on this aspect. The additional information sought by end consumers can be succinctly categorized into three main areas that could be made available to the final consumer within the blockchain by uploading relevant information. Firstly, there should be an effort to address factors that hinder fair trade consumption by providing more insights into the fair trade concept, with a specific emphasis on explaining the higher price of the product. The question of pricing is paramount, as the additional amount paid by the end client is a fundamental element of fair trade. This surplus contributes to enabling the producers to lead a decent life with their families, and it may also support community projects. By offering a deeper understanding of these aspects, consumers can appreciate the significance of the higher price and its positive impact on the producers' well-being and community initiatives. Furthermore, enhancing consumer knowledge about the product and the producer (or community) is pivotal. This involves furnishing the consumer with in-depth information that aligns with their expectations of a fair trade product. Full traceability and transparency within the supply chain become crucial attributes, providing consumers with confidence in their choice to purchase a fair trade product. The dissemination of such comprehensive information serves to reinforce the consumer's commitment to fair trade, assuring them that the product aligns with their ethical and social expectations.

Concerning the case study, it has to be noted that paper documents are surely a very important aspect of documenting different transactions, but a digital copy of all these steps will greatly improve traceability and they could be uploaded to a blockchain for improving traceability. For example, the results of organic production controls, which are carried out by taking samples that are sent to an independent laboratory outside Bolivia, could be communicated to the consumer by uploading this information to the blockchain. It can be discussed to what extent the exact result of the analysis is relevant to the final consumer as it is quite technical, but the information of when and where it happened could be interesting to the final consumer. Also, all the different transport and warehousing steps that are currently documented on paper could be uploaded to the blockchain to have the information available on the internet. It is important that the transport route of the quinoa can be followed by the end consumer in order to be linked to the producer. Also, as it is done today on paper, both parties have to agree to the transaction digitally, and in this way, a double entry could be made to the blockchain in order to avoid wrong or misleading information.

In examining the logistical processes at the factory level and considering the potential integration of

information into the blockchain, a crucial aspect lies in the storage in silos because mixing from various producers occurs. The challenge arises in maintaining end-to-end traceability, as observed in the case of quinoa real production at the ANAPQUI factory in Challapata, where harvests from different districts around the salt deserts are combined in silos. To achieve the objective of full traceability, particularly in understanding the origin of processed quinoa real in the factory, a proposed solution involves reevaluating the current storage system in silos. Depending on the traceability objective, whether at the district or producer level, different processing schemas at the factory are possible. For full traceability starting at the district level, the suggestion is to modify the current storage system in silos. Specifically, each silo would exclusively contain the harvest from one district, and refilling would only occur after processing all the quinoa within. Given the presence of multiple silos around the factory, this proposal seems viable. Additionally, alternative storage facilities at the factory level could be established or repurposed to store quinoa real from different districts separately. The transfer into silos and subsequent processing would only occur as needed. While fair trade organizations currently request traceability information for quality control purposes, it could help to extend this information directly to end consumers, particularly within the context of a "long-short" supply chain. However, if the objective is to achieve full traceability back to the producer level and potentially even to the plot level, a more challenging approach is necessary and traceability needs to start at the community warehouse. At the factory level, the harvest of each producer would have to be processed sequentially, and uploading this information into the blockchain would be essential. Yet, this approach may pose difficulties in implementation, especially for very small-scale producers who do not contribute substantial harvest quantities. Careful consideration and potentially tailored solutions are required to address these challenges at the producer level.

The use of BCT in supply chains can change the nature of supply chains insofar as long supply chains can have attributes of short supply chains, giving rise to "long-short" supply chains. Small-scale producers can take advantage of the implementation of a "long-short" supply chain to promote their products to consumers in the Global North within the framework of fair trade. Aside from the increased traceability of the fair trade product, the producers could give particular information on their products and the efforts they put into it. At the end of the chain, the consumers could have more information on the fair trade product they are buying and on the value-added services at each step of the supply chain. If digital tokens are used in the blockchain, the consumer could also choose to reward the producer by paying more than requested by the final retailer. The consumer could get all relevant information through the scan of a quick-response code (QR code) on the packaging at the consumer level. At each step, a two-party verification system should be implemented to avoid the input of wrong or false information on the blockchain.

A definition of a "long-short" supply chain could be as follows: a "long-short" supply chain is a physically long supply chain where the products go through various intermediaries on a long geographical distance, but where the end consumer can have access to all the information on the attributes of the product he or she is buying (including exact origin, inputs used, laboratory analysis results, different intermediaries, etc.), as in a short supply chain when the product is bought directly from the producer (or with maximum one intermediary). The implementation of a "long-short" supply chain is possible thanks to BCT and the notion of "long-short" supply chain is complementary to the concept of "total traceability" (Lazzeri and Fabbe-Costes, 2014).

The focus of this study is on the fair trade sector and thus has practical implications for fair trade organizations and the fair trade producers associations. In terms of managerial implications, the study shows that fair trade organizations should try to establish "long-short" supply chains in order to increase demand for these products through better traceability and more transparency about the production processes and producers of these products. Fair trade entities may find it beneficial to restructure their supply chains, fostering improved communication on the products of southern producers. Simultaneously, these organizations could aim to enhance traceability and furnish comprehensive information on product quality. Essentially, the objective is for fair trade organizations to establish a "long-short" supply chain, bolstering producers themselves. In practical terms, the implementation of BCT in the supply chain revolves around cultivating a shared vision among all participants, fostering clarity on the exchanged products. From a supply chain standpoint, the essence of blockchain lies in its capacity to generate a singular, dependable source of information.

Another contribution of this work is to have formed the notion of a "long-short" supply chain and to have highlighted it in the context of fair trade around the notion of trust stemming from blockchain. Thanks to BCT, the information asymmetry between the producers and the consumer can also be reduced.

Limitations of the research on the development of the concept of "long-short" supply chains are that the

analysis was not carried out on the entire supply chain with all the actors. There is also the question of the pivotal role of the distributor in a supply chain, and whether this role would not be shifted to the end consumer with the implementation of total traceability (Saucede and Fenneteau, 2017). Another potential avenue for future research could involve investigating the extent to which BCT can mitigate the impact of neutralization when consumers are confronted with the decision to make fair trade purchases in a supermarket and finally do not buy the product (Chatzidakis, 2007; Eckhardt et al., 2010).

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