

**CATÓLICA
LISBON**
BUSINESS & ECONOMICS

**Leading a Movement towards Effective Valuation
Processes and Equal Value Distributions - The Role of
Specialty Coffee**

Teis Meijer

152120349

The dissertation is written under the supervision of professor Laure Leglise.

**The Dissertation was submitted in partial fulfillment of requirements for the MSc in
International Management - Entrepreneurship & Innovation at the Universidade Católica
Portuguesa, on the 1st of June, 2022.**

Table of Content

Abstract (ENG)	3
Abstract (PT)	4
Acknowledgment	5
Introduction	6
Literature Review	10
Negative Consequences of Power Centralization	10
Commodity-Traded versus Specialty Coffee Value Chains	11
The Valuation of Product Quality	13
The Valuation of Sustainability Practices	14
Current Effort to Improve Product Valuation	16
The Valuation Theory as Theoretical Framework	18
Methodology	20
Data Sources	20
Figure 2: Primary Data Collection	22
Figure 3: Value Chain Analysis Case Studies	25
Data Analysis	26
Figure 4: Data Analysis - Coding Tree	27
Findings	29
Maintain Transparent Valuation Processes	30
Trace Value-Adding Activities	30
Measure Impact & Product Quality Experience	32
Collective Action leads to Systemic Change	32
Formalize Industry Definitions for Specialty Coffee to professionalize the Industry	33
Standardize Valuation Processes for Intrinsic and Extrinsic Production Systems	33
Transform Intrinsic Valuation Processes Irrespective of the C-Market Price for Arabica Coffee	34
Increase the Willingness of both Private and Public Investments to build a Resilient (Specialty) Coffee Industry	35
Empower Producers by moving from a Value Chain to a Value Network	36
Discussion	39
Conclusion	41
Bibliography	43
Appendices	50
Data Analysis - Constructed Codes & Definitions	50
Data Analysis - Coding Table & Data Triangulation	53
Data Analysis - Analyzed Case Studies	66
Data Analysis - Secondary Data Collection	70
Data Analysis - Omitted Code	72
Data Collection - Interview Questions & Themes	74
Example of Certification Price Premiums	75

Abstract (ENG)

The coffee industry is at risk as the disparity of wealth between coffee-producing and coffee-consuming countries increases and enormous obstacles such as environmental crises and extreme price volatility are blocking the path to a sustainable and viable coffee industry. Specialty Coffee is defined as the highest quality coffee premium and has proven to be the front-runner in the transition towards a more sustainable coffee industry. Therefore, this study contributed to previous research by adopting an unique in-depth case study of the Specialty Coffee value chain approach and by isolating this segment and understanding the dynamics between different actors and stakeholders. Moreover, this study will supplement previous research by taking a holistic perspective on valuation processes by including both intrinsic and extrinsic production systems and analyzing different actors' perspectives instead of focusing on a specific actor or step within the value chain. Valuation Theory will provide the theoretical framework to answer the research question: *How can actors of the Specialty Coffee industry construct valuation processes for a more equal distribution of value?* This study found that actors of the specialty coffee industry are setting the stage for systemic stage through Collective Action. The Collective Action of the industry is directed at building Value Networks with coffee-producing actors at the center, which should guarantee a more equal distribution of wealth and power. Moreover, the Collective Action aims to improve the degree of transparency and measurability of processes that consequently enhances the effectiveness of valuation processes.

Title: Leading a Movement towards Effective Valuation Processes and Equal Value Distributions
- The Role of Specialty Coffee

Author: Teis Meijer

Keywords: specialty coffee, valuation processes, unequal value distribution, valuation theory, collective action, transparency, measurability, traceability

Abstract (PT)

A indústria do café está em risco porque a desigualdade de riqueza entre os países produtores e os países consumidores está aumentando e além disto há obstáculos enormes como as crises ambientais e a instabilidade dos preços que estão a bloquear o caminho para uma indústria de café sustentável. O café especial é definido como o café premium de qualidade mais elevada e tem provado ser o líder na transição para uma nova indústria de café. Além disso, irá complementar a investigação anterior, adotando uma perspectiva holística dos processos de avaliação no que diz respeito a cafés especiais, incluindo sistemas de produção intrínsecos e extrínsecos e analisando as perspectivas dos diferentes intervenientes em vez de se concentrar num só interveniente ou numa só etapa específica dentro da cadeia de valor. A Teoria da Valorização fornecerá o quadro teórico para responder à questão da investigação: Como é que estão os intervenientes da indústria de cafés especiais a construir processos de avaliação para uma distribuição mais equitativa do valor? Este estudo acha que os intervenientes da indústria de café especial criam o cenário para um cenário sistémico pela Ação Coletiva. A Ação Coletiva da indústria dirige-se à construção das Redes de Valor em que os intervenientes que produzem café encontram-se no centro, o que deve garantir uma distribuição mais justa de riqueza e poder. Além disso, a Ação Coletiva visa melhorar o nível de transparência e de mensurabilidade dos processos que por conseguinte aumenta a eficácia dos processos de avaliação.

Title: Liderar um movimento em direcção a processos de avaliação eficazes e distribuição mais equitativa do valor - O papel do café especial

Author: Teis Meijer

Keywords: café especial, processos de avaliação, distribuição mais equitativa do valor, teoria de avaliação, acção colectiva, transparência, mensurabilidade, rastreabilidade

Acknowledgment

Hereby, I would like to express my gratitude to the 12 participants of the organizations who offered deep and honest insights into the industry as a whole. Moreover, would like to sincerely thank my thesis supervisor, Laure Leglise, for supporting me throughout the development of this research. Lastly, I would like to mention the kind support I received from my partner, family, and roommates.

Introduction

During the 2008 food crisis, The World Bank estimated that 119 million people were consequently pushed into famine (Maurice & Davis, 2013). Due to the reduction of arable land in combination with a growing world population, there is a significant need to control the agricultural and sustainability input of the food industry (Hamprecht et al., 2005). Consequently, an organization's sustainable corporate performance is now at the foundation of an organization's license to operate (Gerbens-Leenes et al., 2003). However, there is an evident lack of international reporting and controlling standards and a strong focus on local operating practices (Gerbens-Leenes et al., 2003), which leads to a lack of transparency and the discouragement for producers to invest in practices that can supply higher-quality and sustainable coffee (Daviron & Ponte, 2005). In general, one can observe an increased awareness of sustainable operations among consumers and organizations. However, systematic caveats can be found that inhibit a true transformation of the food industry. One such issue is the lack of transparency in increasingly global value chains, which leads to decreased traceability and measurability of value-adding activities (Wognum et al., 2011). Consequently, this complex issue impedes the accurate valuation of value-adding activities regarding sustainability and quality in the food industry as a whole (Wognum et al., 2011).

In 2018, for the first time in over a decade, the global commodity price for green Arabica coffee, also known as the C-price, fell below 1.00 US Dollars per pound (MacroTrends, n.d.). It left coffee-producing farms unprofitable and brought these commodity-dependent developing countries (CDDCs) near a state of humanitarian crisis (Maurice & Davis, 2013). In 2019, this nosedive in price was followed by a steep increase up to 1.25 US Dollars, when Brazil's estimated a lower expected harvest in combination with an already existing shortage in washed Arabica (SCA, 2019). Given that most farmers depend on a single harvest per year, this price volatility posed a significant risk for farmers and the entire coffee-producing nations, especially given the significant dependency on these commodities for international trade (Ross, 1999). Commodity Dependent Developing Countries (CDDCs), for whom coffee is their main export (Maurice & Davis, 2013), have been confronted with a vast amount of crises over the previous decades that often could be linked to the effects of global warming (Laderach et al., 2011). As a result, this has rendered these CDDCs vulnerable to substantial price volatility in the coffee

industry (Maytaal & Teixeira, 2019). Moreover, this risk often does not result in a higher economic gain which could be accredited to the unstable political environments frequently present in the CDDCs (Ross, 1999). Consequently, farmers are discouraged from investing in long-term processes that could improve the quality and sustainability of coffee production (Giovannucci, 2001).

Despite the large volume of value-adding activities in the countries of origin, there is an apparent centralization of power and wealth visible in the consuming coffee countries (Fitter & Kaplinksy, 2001). Most coffee-producing countries are low- and middle-income countries, and while the green coffee trade increased considerably, the role of these countries has reduced (Utrilla-Catalan et al., 2022). On the other hand, coffee-consuming countries further consolidated their power, which led to a disparate and unrepresentative value distribution (Utrilla-Catalan et al., 2022). Therefore, we can conclude that the coffee industry can be characterized by significant inequalities between coffee-consuming and coffee-producing countries.

Despite the unstable conditions coffee producers face, coffee quality and the interest in Specialty Coffee have grown to be the most critical factor influencing consumers' purchasing decisions. Giovannucci analyzed 2098 cases and found that 91.9% believed the factor "Specialty Coffee quality or taste" was of "very high importance" to consumers' purchasing decisions, as was explored in the Sustainable Coffee Survey (2001). The growing importance of the quality that Giovannucci described can be considered part of the "Third Wave", " which Trish Rothgeb coined in 2002 in the Roasters Guild Publication (Light, 2019). The analogy to waves was used to define the paradigm shifts in the coffee industry. The "First Wave" dates back to the 1800s and explores the movement from coffee as a niche product for early adopters to a mass-produced and mass-consumed product that heavily advertised and focused on price reductions and efficiency (Rosenberg et al., 2018). The "Second Wave" dates back to the first mention of Specialty Coffee by Erna Knutsen and the stronger emphasis on quality for a select niche market (Rosenberg et al., 2018). The most recent "Third Wave" is characterized by the intent of many consumers to understand better where their coffee comes from and how it can be produced and consumed to maximize the intrinsic quality of the product (Rosenberg et al., 2018).

In order to better understand and reduce the disparity of wealth distribution and the intense concentration of power in consuming markets (Wognum et al., 2011), this study aims to understand the perspectives of different actors along the Specialty Coffee value chain as well as their interactions and relations. Most previous research was dedicated to understanding a specific factor influencing the value chain, such as the adoption of fairtrade (Reinecke, 2010) or a specific step within the value chain by, for instance, focussing on the development of consumer needs (Sepúlveda et al., 2016) (Giovannucci & Koekoek, 2007). The complexity of the issue regarding effective valuation processes and wealth distribution drives us to adopt a more holistic perspective and utilize exploratory research methods. To contribute to this gap, we aim to answer the following research question: *How can actors of the Specialty Coffee industry construct valuation processes for a more equal distribution of value?*

To answer this research question, the theoretical framework established within Valuation Theory will lend a lens to analyzing the valuation processes. We adopted a qualitative approach and conducted an unique in-depth case study of the Specialty Coffee value chain to better understand the perspectives and interactions of actors along the entire value chain. The results show that quality valuation processes are socially constructed by actors of the industry such as the Specialty Coffee Association to counteract the lack of formal standardization of processes and definitions within the industry. Moreover, the Specialty Coffee industry is aware of its responsibility to educate consumers on quality and sustainability practices to guarantee a healthier, more sustainable future industry. The common belief is that through Collective Action, systemic change can be realized, and the Specialty Coffee industry can be transformed, potentially setting a solid example for the transformation of the adjacent commodity-traded coffee segment. In order to improve the valuation of sustainability factors, traceability and measurability are key. The aim to move toward more transparent value chains was repeatedly mentioned by participants, and the idea of Value Networks was raised. In Value Networks, a farmer is positioned at the center of the valuation process instead of merely at the beginning of the chain.

This study will first analyze the existing literature regarding the specialty coffee industry, after which it will discuss the lens of Valuation Theory. Afterwards, the adopted methodology of a

unique, in-depth case study of the Specialty Coffee value chain will be illustrated and justified. Lastly, the result will be analyzed by exploring the actionable findings, the findings' relationship to the existing literature discussed, and the outlook for future research described.

Literature Review

a. Negative Consequences of Power Centralization

High-quality coffee is in short supply, despite the notable increase in demand for Specialty Coffee across the world (Sepúlveda et al., 2016). The friction between supply and demand that Sepúlveda et al. recently illustrated (2016) was already observed a decade earlier by Daviron and Ponte and was coined the Coffee Paradox (2005). The increased demand for higher-quality coffee is also highlighted because Arabica, generally accepted to be of higher quality than the Robusta species, disproportionately outgrew Robusta in terms of demand (Levy et al., 2016).

Despite the increased demand of consumers, the coffee industry is defined by Utrilla-Catalan et al., as increasing in terms of inequality and unequal distributions of wealth, which illustrates how the value distribution is skewed in favour of actors in coffee-consuming countries (2022). The inequality between actors is further portrayed by the consolidation of the industry with power centralization mostly visible in consuming countries (SCA, 2019). Strikingly, the largest companies in the industry actively acquired smaller roasters and retailers, which resulted in a competitive landscape where merely ten roasters supply over 35% of the global coffee industry (SCA, 2019). According to Daviron and Ponte, the concentration of power and the focus on price competition among these large organizations discourages the social, economic and environmental sustainability transformation required to maintain a viable industry (2005). Moreover, the discouragement of farmers to produce high quality and sustainable coffee due to extreme price competition is troubling given the development of climate change and the farmers' vulnerability to unstable temperatures and precipitation (Laderach, 2011).

According to Laderach et al., there is strong evidence that climate change will lead to higher mean temperature and changing precipitation, which will require site-specific adaptation strategies to sustain the livelihood of coffee-dependent communities (2011). Due to the fact that coffee farmers depend on a single harvest cycle per year and require to invest heavily into the production of their product, these Commodity-Dependent Developing Countries (CDDCs) do not have alternatives or insurances when crises happen (Maurice & Davis, 2013). Without political intervention or possibilities to diversify the risk associated to the trade of a single crop,

coffee-producers will remain extremely vulnerable to climate and price volatility (Daviron & Ponte, 2005). This price volatility is caused by natural phenomena, such as climate crises that damage harvests or by the price mechanism of the C-Market, where future trader speculate on price movement of arabica coffee (Daviron & Ponte, 2005). The differences between Specialty Coffee and commodity-traded coffee will be discussed in the next section.

b. Commodity-Traded versus Specialty Coffee Value Chains

To comprehend the differences between commodity-traded and Specialty Coffee, an analysis of their respective value chains and their definitions of value are crucial and will be explore in this section.

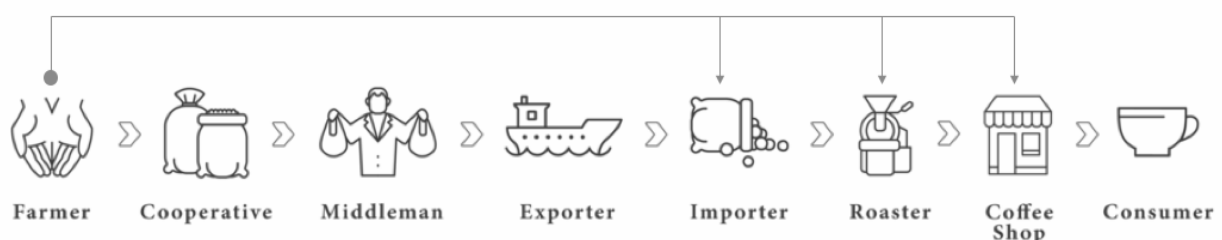
Porter coined the term value chain when describing the sequence of value-adding activities before a product arrives at the consumer (1985). Porter's revolutionary work was widely adopted and further developed by Walters & Lancaster, who defined the modern value chain as "a business system that creates end-user satisfaction and realizes the objectives of other member stakeholders" (2000, 1). Due to steep increases in the demand for coffee consumption, the actors of the commodity-coffee value chain focussed on bringing low quality and efficiently produced coffee to the C-Market for distribution (Daviron & Ponte, 2005). Actors in coffee-consuming markets enjoyed a strategic position in the value chain, and managed to reap the benefits of the increased demand disproportionately, while neglecting the needs of other member stakeholder such as the farmers (Daviron & Ponte, 2005).

Since the introduction of the C-Market, the only value attribute that was defined to facilitate the valuation process for coffee was that the green coffee beans are from the Arabica species. Consequently, there is no differentiation premium incorporated into the price for different quality-grade coffees within the Arabica species (Daviron & Ponte, 2005). Therefore, issues arise in the objective valuation process of higher-grade coffee, which lead to coffee farmers opting for the production of lower-grade commodity coffee to obtain prices that accurately reflect the product's quality avoiding unnecessary investments (Daviron & Ponte, 2005). This changed when companies started serving a premium segment of the market that was rapidly growing and

demanded better traceability of origin and production processes (Sepúlveda et al., 2016). Consumer trends indicate that coffee preferences are shifting away from the consumption of commodity-coffee to specialty-grade coffee (Giovannucci, 2001). Where advocates of Specialty Coffee emphasize the uniqueness of a specific production batch, commodity coffee can be characterized by trade in large, often blended, batches from hard to trace origins (Daviron & Ponte, 2005). To illustrate the complex observable stages from crop to cup, Salomone build upon the Value Chain Theory and introduced the term Coffee Life-Cycle (2003). The coffee life cycle is often referred to by actors along the Specialty Coffee value chain as it emphasizes the traceability of origin and a clear focus on high-quality production standards in smaller volumes (Sepúlveda et al., 2016).

To illustrate, a simplified value chain of Specialty Coffee is compared to the traditional value chain of commodity-grade coffee in **Figure 1: Traditional versus Specialty Coffee Value Chains**. Traditionally, cooperatives, intermediaries, and exporters took a strong position in the value chain as they moved large volumes and could therefore cover the high costs of their value-adding activities and enjoy a significant portion of the distributed value (Daviron & Ponte, 2005). On the other hand, for Specialty Coffee it became viable to directly cooperate with importers, roasters, and retailers due to the increased consumers' willingness to pay for higher-quality coffee from a more sustainably constructed value chain (Giovannucci, 2001). This was essential in order to improve the traceability of origin and the focus on quality instead of volume, which Knutsen considered both crucial factors when she coined the term Specialty Coffee (Knutsen, 1973). Knutsen's lifework focused on increasing coffee quality by moving away from coffee as a commodity and, in turn, generating interest in trading smaller batches of more carefully curated and processed coffee beans whose origins can be traced back to distinct farms or regions (Knutsen, 1973). Knutsen's emphasis on traceability of origin initiated a search for direct-trade relations, long-term partnerships, vertical integration, and the use of technology to build transparency within this traditionally untransparent legacy system.

Figure 1: Traditional versus Specialty Coffee Value Chains (Aequitas Coffee, 2022)



c. **The Valuation of Product Quality**

Quality production practices focus on the innate and objective qualification of coffee where Specialty Coffee, in particular, is considered the highest grade of coffee quality (Roseberry, 1996). Within the Arabica species, organizations such as the Specialty Coffee Association (SCA) attempted to professionalize the industry by introducing said quality grading systems to help define the valuation of coffee. Coffee valuation is the process of constructing value categories that define the worth of a product in a market (Reinecke & Ansari, 2012). The objective quality-grading of Specialty Coffee, therefore, facilitates the discussion of assigning a differentiation premium to higher-quality products (Weatherspoon & Donnet, 2007). Despite the SCA's intentions to standardize quality valuation processes and value category definitions (SCA, 2021), the enormous consumption of coffee causes these valuation processes to be complicated to control (Reinecke, 2010). Therefore, one of the most pressing issues Reinecke and Asari described is the observed uncertainty concerning establishing a shared understanding for valuing a good (2012). Even though defining Specialty Coffee has been a point of debate, the Specialty Coffee category is one of the fastest-growing categories within the coffee industry (Sepúlveda et al., 2016). It will, therefore, significantly affect one of the most important agricultural markets in the world.

Despite the increasing interest in Specialty Coffee from a consumer standpoint, relatively little research focuses on the *intrinsic production processes* of coffee, which relate to the overall quality experience of the end-product as defined by Sepúlveda et al., due to its apparent difficulty to define product value objectively (Menger, 2007[1871]). This raises significant concerns for valuation processes, as without clear and objective standardization of coffee quality, asymmetrical information will lead to an inefficient or possibly failing market (Barbaroux, 2014). This further instigates the already present unequal value distribution and could lead to an industry that, on the one hand, sees increasing demand and economic growth yet is not economically viable for all actors of the value chain (Utrilla-Catalan et al., 2022).

The closest attempt at objective quality framework was accredited to the SCA (formerly SCAA), which formulated guidelines to measure and standardize coffee bean evaluation. Cupping sessions, during which coffee bean quality is evaluated in a semi-scientific method, are used to

assign a quality score from 0-100 to a specific batch based on different parameters such as fragrance/aroma, after-taste, flavor, acidity, body, uniformity, balance, sweetness, clean cup, and overall quality. After weighing the scores across different parameters, an overall score of over 80 points would be defined as Specialty Coffee (SCA, 2021). Contradictingly, Menger portrayed how both the nature and the measure of value are subjective, which further emphasizes the need for standardization processes (2007[1871]). Nonetheless, the Specialty Coffee Association explores a counter-perspective to the subjectivity theory by Menger in their whitepaper “Towards a Definition of Specialty Coffee”. Even though the SCA also highlights the ambiguous process of constructing product quality, they emphasize how value can be determined by measuring specific coffee attributes (SCA, 2021). These coffee attributes can be equated to the concept of value categories that is imperative to Valuation Theory (Reinecke & Ansari, 2012). Trish Rothgeb, CEO of Wrecking Ball Coffee Roasters, interestingly illustrated this perspective in the Los Angeles Times: "Taste is subjective, but quality should not be" (2019).

Eventhough, sustainability practices are not per definition an innate aspect of Specialty Coffee, Sepúlveda et al. illustrated the integral roles of the sustainability category to facilitate the valuation process of Specialty Coffee as a whole. Sustainability valuation focuses on the way coffee is produced, processed, and sold (Roseberry, 1996), which will be discussed below.

d. The Valuation of Sustainability Practices

During the last decades, the focus on the fair valuation of sustainability practices enjoyed growing interest from consumers in the largest coffee-consuming markets in the world (Giovannucci & Koekoek, 2007). This trend accelerated the demand to understand where and how coffee is produced and if this was done according to a minimum standard of sustainability practices, which can be defined as *extrinsic production systems* (Sepúlveda et al., 2016). The demand is illustrated by the wide range of certificates and sustainability projects that are considered crucial enablers within the specialty and commodity coffee markets (Purvis et al., 2019). These initiatives can be characterized by three main pillars: social, economic, and environmental (Purvis et al., 2019). According to Purvis et al., these three pillars have conflicting goals yet require to be managed conjointly for sustainable development to occur (2019). Giovannucci and Koekoek also conclude that the market is effectively controlled and managed,

to a certain extent, through certifications such as Fairtrade, Organic, and Rainforest Alliance (2007). Moreover, Sepúlveda et al. argue that it provides product differentiation and, therefore, increases smallholder producers' likelihood of successful market entry. In the example of fairtrade and organic certifications, clearly defined minimum prices and premiums are paid on top of the commodity price of coffee, also known as C-Price, for coffee produced according to these sustainability standards (See *Appendix G: Example of Certification Price Premiums*).

Previous, research has primarily focussed on consumer demand and willingness to pay for sustainable operations. Furthermore, its methodologies often isolated one specific program, initiative, or certification to be analyzed. However, this approach does not account for the strong social construction of processes and, therefore, could miss important initiatives by different actors within the industry. In order to transform the coffee industry and guarantee a more equal distribution of wealth and power, sustainability also requires to be analyzed and conceptualized holistically.

Where legal production and trading standards are characterized by slow and bureaucratic governance, optional sustainability standards are growing in importance (Daviron & Ponte, 2005). This is primarily due to increased consumer demand for sustainable products and the pressing need to distribute value more fairly across the value chain (Utrilla-Catalan et al., 2022). The organizations that manage these certifications have the experience, political control, and resources to maintain the standards it prescribes to coffee farmers (Giovannucci & Ponte, 2005). Moreover, these large governmental organizations have shown interest in collaborating with the private sector (Daviron & Ponte, 2005). They will have a crucial role in facilitating the general adoption of the related value framework, which is referred to as the "Politics of Value" by Reinecke & Ansari (2012).

Nevertheless, attempts at greenwashing, and the consequent dilution of the value of sustainable coffee standards, are evident due to the increased numbers of claims and certifications (Giovannucci & Ponte, 2005), which is an essential point of future research in order to facilitate the consumer preferences for more sustainable alternatives. Furthermore, according to Giovannucci and Ponte, certifications are still criticized due to the leniency with which they are

often audited, controlled, and guaranteed (2005). This decreases transparency significantly and reduces actors' trust along the coffee lifecycle and their willingness to pay a differentiation premium (Giovannucci & Ponte, 2005). The visible product differentiation with regard to sustainable coffee has already led to a higher willingness to pay for consumers (Giovannucci & Ponte, 2005). Nevertheless, to incentivize more farmers to produce higher volumes of sustainable coffee, a more significant fraction of the differentiation premium needs to go to the producers of this product (Giovannucci, 2001). Furthermore, the SCA explains in their Price Crisis Response Initiative that the maintenance of sustainability certification is costly, which proves to be a barrier for smallholder farmers (2019). The reduced access places these smallest farms out of the market as their practices might be up to standard, however, there is no way to validate this.

Even though a vast amount of limitations and caveats regarding sustainability certifications and standards have been highlighted over the years, it has guaranteed fairer prices for sustainably produced coffee and incentivized farmers to explore sustainable production and processing methods (Giovannucci & Koekoek, 2007). Therefore, coffee consumers' interest in "green brands," Papista identifies, can lead to true brand loyalty when the value construct is in line with and is justified by its price (2018).

e. Current Effort to Improve Product Valuation

Besides defining valuation processes, further developments have been identified to move toward a better valuation process and, consequently, pricing. Due to advances in genomics for both *Coffea Arabica* and *Coffea Canephora*, also known as Robusta coffee, biochemical components were identified that are proven determinants in positively evaluating the overall quality of the coffee bean. (Tran et al., 2016)

Secondly, digital transformation of the global supply chain through, for example, applications of blockchain technology in supply chain management and the trading of commodities have significantly increased transparency along the coffee life cycle and therefore trust in one's product or production partner (Juma et al., 2019). Trust along the supply chain leads to a

situation where pricing can be justified and serves as a shared value framework, as defined by Reinecke and Ansari (2012).

Thirdly, a shared value framework can be defined in a context of interdependence caused by the common perception of long-term partnership (Izquierdo & Cillán, 2004). This leads to an enhanced perception of trust between supplier and buyer, as Izquierdo and Cillán (2004) explained. This is evident from the increased amount of direct-trade between Commodity Dependent Developing Countries and coffee roasteries and retailers, and their increased degree of vertical integration of the value chain (Maurice & Davis, 2013).

Despite the many initiatives to professionalize the industry, confusion surrounding the definition of Specialty Coffee remains, and failure to utilize standardized valuation processes regarding both product quality experience (intrinsic production systems) and sustainability (extrinsic production systems) is likely to deteriorate the value of sustainability standards and certifications and quality scores (Giovannucci, 2001). Therefore, this research will not only aim to further analyze the valuation process of Specialty Coffee but also to formalize the generally accepted rules of the game that are expected to be socially constructed by actors within the Specialty Coffee industry. Furthermore, previous research regarding coffee valuation processes, aimed either to understand a distinct factor influencing the value chain, such as the adoption of Fairtrade (Reinecke, 2010) or an single step within the value chain by, for example, analyzing the development of consumer needs (Sepúlveda et al., 2016) (Giovannucci & Koekoek, 2007). Due to the complex-nature of the problem related to effective valuation processes and wealth distribution this study adopts a holistic perspective and exploratory research methods. To contribute to this gap, we aim to answer the following research question: *How can actors of the Specialty Coffee industry construct valuation processes for a more equal distribution of value?*

The Valuation Theory as Theoretical Framework

In order to guarantee an effective economic valuation process, two general perspectives were introduced throughout history, starting in the 1930s with the Marxist economic theory (Marx, 1930) (Reinecke & Ansari, 2012). One perspective believed in the ability to *objectively* define the value of a product by measuring the different forms of concrete labor required to produce a commodity. According to this view, there is an evident power dynamic between the actors that provide the labor and the actors that invest capital that conjointly constructs the value of a product (Reinecke & Ansari, 2012). On the contrary, the perspective of Neoclassical economics contradicted this school of thought as it believed the valuation of a product as well as the valuation processes themselves ought to be considered subjective. A valuation can be constructed by analyzing the marginal utility of a product. It formulates that self-interested actors are incentivized to maximize their utility independent of labor. Reinecke and Ansari, therefore, reformulate value as "*...the aggregate product of the rational choices of self-interested individuals*" (2012: 4), which emphasizes the valuation through the willingness to pay of the different actors along the value chain which closely resembles the valuation process on the C-Market. However, it neglects the influence of political standards with regards to processes and interventions that are implemented to maintain a minimum threshold to protect actors in less powerful positions (Reinecke & Ansari, 2012).

Furthermore, these different perspectives on Valuation Theory completely disregarded social values, which according to Fourcade, are largely intertwined with the economic valuation as the value judgments and evaluative frames are connected to the politico-institutional configurations and conflicts (2011). Combined social and economic value construction was defined as the concept of "worth" (Boltanski & Thévenot, 2006), which provides a more contemporary perspective on valuation theory given the increased demand for sustainable (coffee) consumption (Levy et al., 2016).

Reinecke emphasized how the market price, or C-Price in the case of Arabica coffee, for a long time embodied the single truth of product valuation for economists (2010). However, through more recent insights from, for example, Porter's "Creating Shared Value" (2011) and others, a paradigm shift occurred that illustrated the necessity to make the distinction between valuations

based on market price and the cultural, social, and ethical factors that contribute to product valuation (Levy et al., 2016). Reinecke and Asari observe that little research is conducted based on the premise that the political processes that define and control valuation positively affect an industry and are guided mainly by constructing categories in which both technical and cultural aspects are considered (2012).

Valuation Theory emphasizes the importance of constructing value categories to guide a consistent valuation process (Reinecke & Ansari, 2012). To guarantee an accurate valuation process, Sepúlveda et al. argue that Specialty Coffee can be categorized into two distinctive production systems. *Intrinsic production systems* refer to the overall quality of the product experienced (Sepúlveda et al., 2016), based on parameters such as fragrance/aroma, after-taste, flavor, acidity, body, uniformity, balance, sweetness, clean cup, and overall quality (SCA, 2021). SCA's approach to quantifying coffee quality is in line with the Valuation Theory as it standardizes the formation of value categories to provide "cognitive structures guiding valuation" (Reinecke & Ansari, 2012). *Extrinsic production systems* refer to the manner of production that nowadays essentially equates to sustainability standards such as certified coffee production (Sepúlveda et al., 2016).

Both valuation categories (extrinsic & intrinsic production systems) will be analyzed in order to understand how actors of the Specialty Coffee value chain can effectively construct valuation processes. To avoid the "Value Problem" as illustrated by Reinecke and Asari, Valuation Theory dictates that for the global Specialty Coffee market to function effectively, quality can be equated to value, based on both intrinsic and extrinsic production processes, and must be accurately reflected in its price (2012).

Methodology

The unequal value and power distributions in the Specialty Coffee industry is a multi-faceted and complex problem, which is why this unique in-depth case study of the Specialty Coffee value chain adopted an inductive, problem-driven focus similar to the approaches of Reinecke et al. (2012) and Reinecke and Asari (2012). The reason for choosing an unique in-depth case study of the Specialty Coffee value chain was to gather qualitative insights from a larger and diverse sample of case studies combined with perspectives from other organizations within the industry. When codifying the collected data, *conceptualized qualitative structures* were used. Furthermore, the study could benefit from previously researched and identified conceptual categories such as the intrinsic and extrinsic production systems that resemble product quality experience and sustainability practices respectively (Sepúlveda et al., 2016).

As the Specialty Coffee industry is under-researched yet growing in importance within the overall coffee industry and at the forefront of implementing sustainability practices, we opted for a qualitative approach to answer the research question: *How can actors of the Specialty Coffee industry construct valuation processes for a more equal distribution of value?*

Data Sources

In order to answer the research questions, it was crucial to better understand the complex value chains and the interactions between actors, as it could be a main reason for the evident unequal value distribution (Utrilla-Catalan et al., 2022). One of the main criteria was that a research subject had to be either active actors of the Specialty Coffee industry or directly influencing or cooperating with these actors. As was previously described, lots of research has been directed at consumers and their buying decisions and product experiences. However, the overall value chain of coffee is characterized by unfair wealth distribution and intransparent processes where the retailers enjoy an apparent concentration of power and wealth (Fitter & Kaplinsky, 2001). Therefore, the impact of the actors in coffee-consuming countries cannot be under-emphasized, especially given their responsibility to educate the consumer on what is required to produce high-quality and sustainably produced coffee for a fair price.

Given this criterion, a shortlist of 12 research subjects was drafted to conduct successful data collection, whose combined perspectives could potentially prove insightful in answering the research question. Given the lack of regulation and control on claims surrounding specialty or sustainably sourced coffee (Gerbens-Leenes et al., 2003), this study aimed to avoid organizations that merely use Specialty Coffee as a marketing strategy. The main requirement to be eligible for this study were:

1. **Industry:** The organization identifies itself as active in the "Specialty Coffee industry" by, for example, expressing Q-grade scores as defined by the Specialty Coffee Association or by focussing on keywords such as "third-wave," "single-origin," "traceable," "micro-lots," "direct-trade."
2. **Sustainability:** The organization aims to be at the forefront of sustainability within the coffee industry and actively addresses sustainability projects and practices in its online communication.
3. **Role in the Value Chain:** The organization characterizes itself as active actor of the Specialty Coffee value chain in a coffee-consuming country or as an organization that actively cooperates or influences the activities of said actors. The degree of vertical integration of these organizations was considered not critical as differences between cases could emphasize different or potentially similar insights, further strengthening the study's findings.

Within these organizations, different stakeholders were contacted that were either in the higher ranges of management (e.g. CEOs, Founders, or Managing Directors) or had strategically relevant positions for the research question (e.g. Sustainability Managers, Community Managers, or Head Barista) through different mediums such as direct mail, LinkedIn or cold phone calls. After multiple outreaches to a maximum of 3 stakeholders per organization, 8 out of 12 agreed to conduct interviews. The positive response rate was surprisingly high, as many organizations felt urged to tell their story and bring about change in the industry. Eventually, through further introductions by interviewed participants, three more organizations were identified as potentially insightful for the research, of which all agreed to 1 or 2 interviews.

In order to answer the research questions and further clarify how higher-quality coffee can be effectively valued and which factors play a role within this valuation process, 12 interviews were conducted across 11 organizations (See **Figure 2: Primary Data Collection**). The cases analyzed were actors of the Specialty Coffee industry or third parties that directly influence important value-adding activities conducted by these actors, such as non-profit organizations or industry experts. A more exhaustive analysis of the organizations and individuals that contributed to this study is provided in **Appendix C: Data Analysis - Analyzed Case Studies**. When analyzing the participants in this study, we can observe that cases have different degrees of vertical integration. In **Figure 3: Value Chain Analysis Case Studies**, the degree of vertical integration and the responsibilities held by the specific cases along the value chain are visualized. Practically, this means that many of the organizations analyzed have in-house distribution, roasting and packaging capabilities, whereas some even control or are deeply involved in the sourcing and trading of the raw materials.

Figure 2: Primary Data Collection

Case Studies	Organization	Name	Role	Date	Duration	Format	Data Type
Damn Good Coffee Company (A)	Retailer	Lasse Gosens	Co-Founder	08/03/2022	00:58	Video Call	Primary Data
Bocca Coffee (Trabocca) (B)	Retailer, Roaster & Trader	Kieran Green	Community & Sustainability Coordinator	16/03/2022	1:02	Video Call	Primary Data
Olisipo (C)	Retailer, Roaster	Antony Watson, Sofia Gonçalves	Co-Founder, Co-Founder	05/04/2022	2:53	In-person (cupping session)	Primary Data
Torra Roasting & Coffee (D)	Retailer, Roaster	Erika de Carvalho Machado da Silva	Owner & CEO	05/04/2022	00:52	In-person	Primary Data
Combi Coffee Roasters (E)	Retailer, Roaster	Gonçalo Cardoso	Owner & Co-Founder	06/04/2022	00:57	Call	Primary Data
PRIMAVERA (F)	Green Bean Trader	Kim Staalman	Customer Relations Manager	28/04/2022	0.51	Video Call	Primary Data

Fairchain Foundation (G)	NGO & Consulting Services	Niek Uitentuis	Building Inclusive Business Models	16/03/2022	0:48	Video Call	Primary Data
Conservation International (H)	NGO	Niels Haak	Director Sustainable Coffee	23/03/2022	0:56	Video Call	Primary Data
Specialty Coffee Association (I)	NGO	Julie Housh	Knowledge Development Manager	29/04/2022	0:55	Video Call	Primary Data
Industry Expert & Buna Specialty Coffee (J)	Industry Expert	Tanya Nanetti	Specialty Coffee Consultant & Head Barista and Trainer	30/03/2022	1:10	In-person	Primary Data
Industry Expert & Impact Investment Project Manager (K)	Industry Expert	Vivian Elion	Impact Investment Project Manager / Previously: Impact Officer at Moyee	22/03/2022	0:52	Video Call	Primary Data

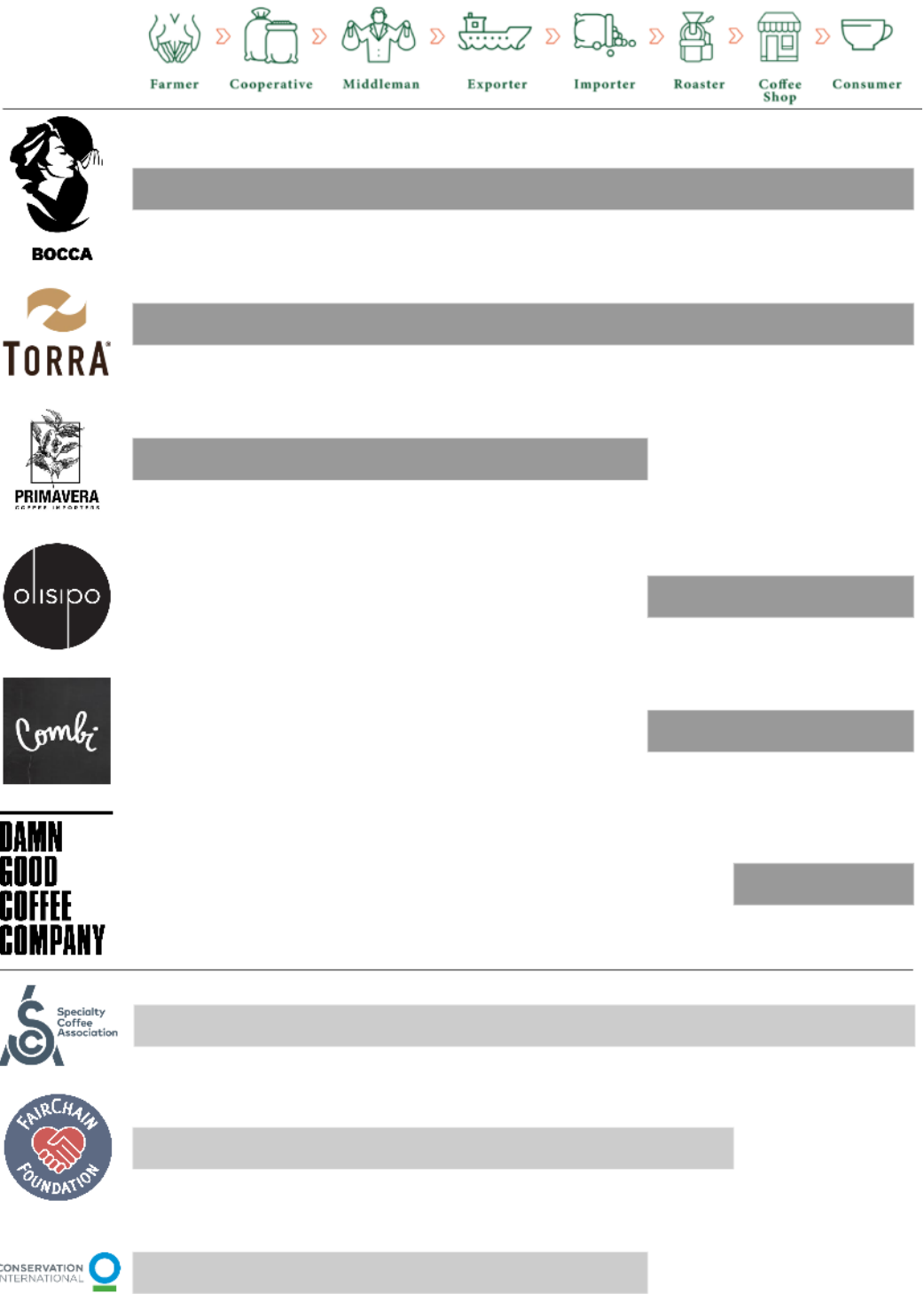
Even though the Specialty Coffee industry is rapidly growing, it is still considered "...a small fish in an ocean of sharks" compared to the commodity coffee market, as the CEO of Torra Roasting & Coffee fittingly put it. That means that the actors within the industry are frequently small and medium-sized businesses with a limited number of employees and departments, which reduces the likelihood of discovering unique insights or contradicting arguments. Fortunately, the participants of the interview were all either in strategically important positions concerning the topic of the research (e.g. community & sustainability coordinator) or were in the highest levels of management (e.g. Founder or CEO), which led me to believe they had the authority to make grounded claims about the organization and the industry. Moreover, triangulating the data across different cases would provide stronger validation of a specific trend. Nevertheless, the researcher attempted to do multiple interviews with different employees to validate this assumption, but due to the limited human resource capacities, most organizations did not agree to further interviews. Another reason I suspect to have influenced this decision from the organizations could be that all initial interviews were extensive and thorough, and further interviews would not provide a deeper understanding.

Non-profits, industry experts, and suppliers were included in the analysis to cross-check the collected data and improve its triangulation. The primary reason for including these third parties was that it could prove insightful to analyze the actors within the Specialty Coffee value chain who have different and often contradicting objectives from the other the direct actors and to understand if they emphasize or introduce different perspectives regarding the research question. If they would portray a similar image of the industry and identify similar trends, the trustworthiness of the collected data could be again tested for validity.

Furthermore, the findings are supported and contextualized through the available secondary data (see *Appendix D: Data Analysis - Secondary Data Collection*), such as podcasts with founders, industry reports, and the available information on the company website that was discovered independently or shared by the interview participants after the interview was conducted.

Figure 3: Value Chain Analysis Case Studies

The Specialty Coffee Value Chain below is a simplified representation. If Specialty Coffee organization focus on direct-trade, for example, the cooperative and middlemen are often ignored and farmer directly sell their coffee beans to roasters.

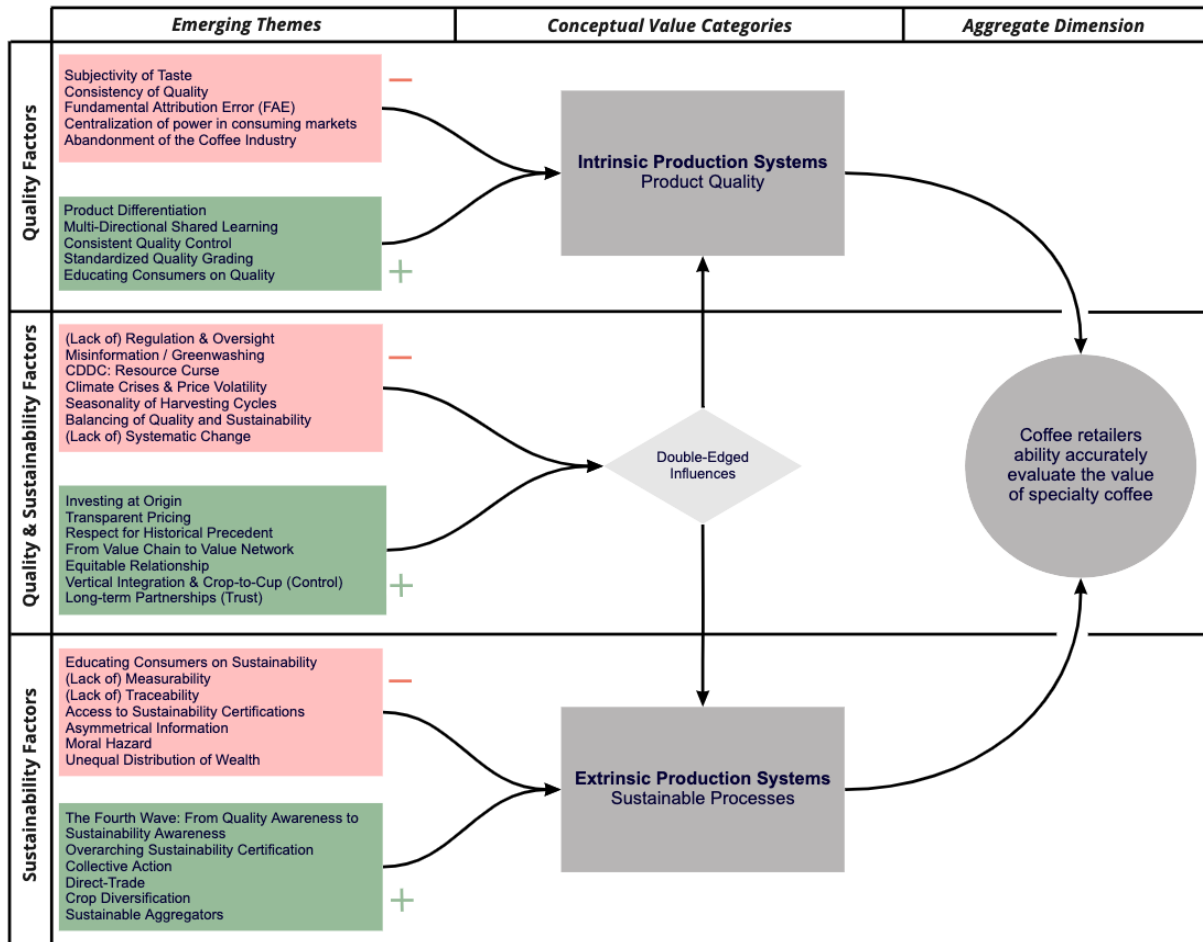


Data Analysis

To analyze the collected data, the recordings of the interviews were revisited, and codes were constructed to define the main emerging factors that positively or negatively influenced the two previously constructed value categories that were defined by Sepúlveda et al.: *intrinsic & extrinsic production systems* (2016) (See **Appendix A: Data Analysis - Constructed Codes & Definitions** and **Figure 4: Data Analysis - Coding Tree**). The *intrinsic production system* can be categorized as Specialty Coffee quality experience as defined by a standardized quality-grading framework such as that of the SCA, whereas the *extrinsic production system* refers to the process of production, which in the context of Valuation Theory can be defined as sustainable practices of production. In **Appendix F: Data Collection - Interview Questions & Themes**, the generic interview questions and themes discussed are portrayed, but to retrieve the maximum amount of valuable insights, each interview was subject to explicit yet limited customization.

A total of 37 codes were constructed through the analysis of previous literature, the theoretical framework that was adopted, the data collected from 12 interviews, and the respective secondary data. The empirically and theoretically constructed code categorization can be found in **Appendix A: Data Analysis - Constructed Codes & Definitions**. In order to clearly define the borders within which this study was conducted, specific codes that were initially constructed during the data collection were later omitted due to a lack of relevance with regard to the research question (See **Appendix A: Data Analysis - Constructed Codes & Definitions** and **Appendix E: Data Analysis - Omitted Codes**). After carefully analyzing the defined codes and categorizing them through a *conceptualized qualitative structure* that was previously explained, the following coding tree was illustrated in **Figure 4: Data Analysis - Coding Tree**.

Figure 4: Data Analysis - Coding Tree



Interestingly, even though different actors in the value chain for Specialty Coffee were investigated, the overall themes were largely overlapping. However, the constructed codes required both omitting and combining themes that were discovered during data collection. To give an example of two themes chosen to be categorized within one code, we could look at "product differentiation." This code included emerging themes such as: "fermentation processing methods," "extraction methods," or "search for new coffee origins," as these themes primarily exist in the Specialty Coffee industry and focus on improved quality perceptions. Product differentiation in the coffee industry was previously identified by Fitter and Kaplinsky, stating that: "Differentiation in the last decades has pushed further specialized distribution and sales networks globally, with increasing market shares of fair trade and Specialty Coffee to be sold at specialty shops (2001). Another example would be with regards to the code "Access to

Sustainability Certifications," which includes the participants mentioning, for example, "Rainforest Alliance," "Fairtrade," or "Organic" certifications. The reason for compiling these emerging themes within one code was that further specification would not contribute to answering the research question and would more likely complicate the identification of trends within the data.

Findings

Unequal value distributions and intransparent processes characterize the coffee industry, as illustrated in previous research (Wognum et al., 2011). Nevertheless, the volume of research regarding this industry is minimal, and if present, it often emphasizes a rudimentary relationship within one specific part of the value chain (Gerbens-Leenes et al., 2003). This causes these studies to be limited in characterizing the development of the entire industry and its value chains. Given the complexity of the coffee value chain and its processes, it is crucial to understand better the interactions between different actors within this value chain and the socially constructed and formal valuation processes. The Specialty Coffee industry, in particular, was established for the pursuit of higher-quality, more traceable coffee and has slowly developed as the front-runner in the movement toward a more sustainable coffee industry with a more equal distribution of value along the value chain (Sepúlveda et al., 2016). For these reasons, this research primarily focussed on actors active along the Specialty Coffee value chain.

Valuation Theory provides a theoretical framework that categorizes valuation processes (Reinecke & Ansari, 2012), and two specialty coffee value categories were previously defined by Sepúlveda et al.: intrinsic and extrinsic production systems (2016). In the case of Specialty Coffee, this involves quality experience (intrinsic production systems) and sustainability practices (external production systems) (Sepúlveda et al., 2016). These two categories are essential to construct in order to facilitate an effective valuation process and fairly distribute value between actors.

In this section, the two main emerging value categories were categorized based on the findings of the study: 1) Maintain Transparent Valuation Processes, and 2) Collective Action leads to Systemic Change. First of all, the most prominent factors that enable or inhibit the construction of Transparent Valuation Processes are: a) Trace Value-Adding Activities, b) Measure Impact & Product Quality Experience. Second of all, Collective Action is composed of initiatives that enable valuation processes, including a) Formalize Industry Definitions for Specialty Coffee to professionalize the Industry; b) Standardize Valuation Processes for Intrinsic and Extrinsic Production Systems; c) Transform Intrinsic Valuation Processes Irrespective of the C-Market Price for Arabica Coffee, d) Increase the Willingness of both Private and Public

Investments to build a Resilient (Specialty) Coffee Industry; e) Empower Producers by moving from a Value Chain to a value network. Combined, these factors will answer the following research question: *How can actors of the Specialty Coffee industry construct valuation processes for a more equal distribution of value?*

1. Maintain Transparent Valuation Processes

The main problem found during the analysis of Specialty Coffee value chain was the need to be more transparent because asymmetrical information drastically complicates the valuation process (See *Appendix B: Data Analysis - Coding Table & Data Triangulation*). Within the defined problem, two sub-issues were identified: the traceability of value-adding activities along the value chain and the implemented measurability of the sustainability practices, which conjointly complicate the actors' ability to accurately value a product at every stage of the value chain. As is evident from *Appendix B: Data Analysis - Coding Table & Data Triangulation*, the different actors indicate the need for transparency and their willingness to invest in transitioning the industry to guarantee more transparent value chains. Consequently, this should improve the valuation process of Specialty Coffee and safeguard a more equal value distribution among actors in consuming and producing countries.

a. Trace Value-Adding Activities

The different actors initiated projects to more transparently trace the steps along the value chain to transition the coffee industry into a sustainable and viable sector. This study found different initiatives that were either implemented or were emphasized as impactful potential improvements. For companies such as Bocca, Torra, or Primavera, this included maintaining direct and long-term relationships with coffee producers at origin through vertical integration of the value chain.

CEO of Torra Roasting & Coffee:

"Due to the direct relationships we have with the farmers and the country of origin, we are able to offer more data and more transparency to our customers who like to know

where their coffee comes from. This is a competitive advantage for us as other companies cannot quickly and easily build relationships like these."

The increased visibility and, in turn, traceability of the different steps required to bring Specialty Coffee to the market. Direct-trade was, therefore, often considered a competitive advantage given the consumer's interest in understanding where their coffee comes from and how it was produced, categorized as extrinsic production systems.

On the other hand, actors such as Conservation International and Fairchain emphasized utilizing technologies such as blockchain, data from satellites, drones, and artificial intelligence to either track the coffee along the value chain or safeguard against unsustainable coffee production.

Director Sustainable Coffee at Conservation International:

"We have an internal science team that is developing ways to measure sustainability at different levels and scales. Increasingly, this is done through remote sensing and the use of drones and even exploring the use of artificial intelligence, for example, to map and monitor deforestation... To scale these innovations and make them widely adopted, public and private actors need to invest in collaborative systems, tools, and methodologies."

Despite the undeniable potential of technological advancement to play a crucial role in the traceability of Specialty Coffee along the value chain, access to technology is limited. The Commodity Dependent Developing Countries that often carry the responsibility of production lack an infrastructure that can support these innovations, which can sometimes be as simple as the availability of cell service or internet, as was emphasized by Uitentuis from the Fairchain Foundation. At the same time, small roasters or retailers in consuming countries often lack the resources to invest in expensive new technologies. Therefore, they rely on both non-profit organizations and political intervention, of which the importance was already described by Reinecke and Ansari (2012).

b. Measure Impact & Product Quality Experience

One of the main factors inhibiting the effective communication of a higher-quality product is the lack of available data, which complicates the justification of a higher price for a consumer. Besides helping to translate a higher price, data is needed to measure the impact of sustainability practices that the consumers are currently demanding.

Co-founder at Damn Good Coffee Company:

“We trust farmers are doing the right things. But even though we know we are working with farms that are using best practices, like shade-trees and not using any synthetic fertilizer...they don't have the data to validate these claims, so it is just gonna stay a really good story.”

Grosen, Co-Founder of Damn Good Coffee Company, illustrated the need for reliable data for effective transactions along the value chain. Despite their trust that producers are taking adequate steps towards more sustainable coffee production, the lack of data complicates the price justification and product differentiation in the eye of the consumer. This evident asymmetrical information could mean a warning signal indicating inefficient valuation processes and, therefore, ineffective transactions between actors of the Specialty Coffee supply chain. Consequently, the study finds an early indication that the lack of measurable data could be one of the causes leading to the unequal value distribution that was firmly validated in previous research.

2. Collective Action leads to Systemic Change

During data collection, nine out of the eleven cases emphasized that Collective Action will lead to systemic change. Through initiatives such as the Future Proof Coffee collective, the Sustainable Coffee Challenge, and, most importantly, The Global Coffee Challenge, the industry shows willingness to unite and push the industry forward. The systemic change that is sought after by these different organizations within the Specialty Coffee Industry is categorized in five main target areas based on the findings of this research, which will be discussed below.

a. Formalize Industry Definitions for Specialty Coffee to professionalize the Industry

Specifically in the more premium segments, the coffee industry has been subject to a substantial degree of social construction. The lack of governmental interference and the need for more explicit conceptualization leads to organizations such as the Specialty Coffee association or main sustainability certifications to take ownership over what it means to be an actor in the higher-quality or specialty-grade coffee value chains.

Community & Sustainability Coordinator at Bocca Coffee

"Every roaster claims to be sustainable, and every roaster claims to be paying their fair wage, but there is not enough to keep these claims accountable... Regulation works to some extent. In terms of, for instance, Fairtrade or other certifications, it allows for a low-level benchmark...but with Collective Action and cohesion, we can put pressure on the low-cost models that we often see, for example, in B2B."

There is an explicit formalization of industry definitions regarding, for example, concepts like "specialty-grade," different bean varieties and their origins, and as well as sustainability practices and certifications associated with higher-grade production. These steps have proven crucial to professionalize the industry and to effectively translate value processes to actors along the value chain, including the end consumer. Nevertheless, a lack of legislation results in actors along the value chain to seek support from competitors and partners in the form of Collective Action to standardize these frameworks.

b. Standardize Valuation Processes for Intrinsic and Extrinsic Production Systems

In order to create a common framework and language with regards to valuation processes, both quality experience (intrinsic) and sustainability practices (extrinsic) are other main focus areas that appeared during this study. Regarding quality, many participants indicated the subjectivity of taste but also emphasized that, to a certain extent, quality could be objective and guaranteed. Multiple cases explained that a quality score is not the solution to the problem of unfair wealth distribution. However, it provides a framework that helps start a conversation and protects producers from an unequal power position.

Knowledge Development Manager at the Specialty Coffee Association:

"It is important because it helps us have this common language (quality scale), because how else do you value coffee? How do you come to the table and have a language that your farmer, your producer, the person who is processing, and your exporting can use in order to say: This is why we want to buy this coffee?"

Despite the critical notes of organizations with regards to the quality scales that the Specialty Coffee Association developed, the mere fact that the large majority of retailers, roasters, traders, and producers all over the world have adopted this framework indicates the need and importance. That being said, most analysis of the value chain illustrated that the cupping scores provided helpful information but could not be seen as the one source of truth in terms of quality experience valuation.

c. Transform Intrinsic Valuation Processes Irrespective of the C-Market Price for Arabica Coffee

The study found that the old legacy systems that are in place for the valuation of commodity-traded coffee still impact the valuation process of Specialty Coffee. It affects both the price volatility due to futures traders on the C-Market for Arabica coffee as well as the previously described influences caused by climate change. There is no differentiation premium for higher-quality coffees on the C-Market, which results in the incentivization of efficiency and price reductions.

Co-Founder at Olisipo Coffee Roasters:

"We are still connected to these old legacy price systems such as the New York C-Market. Sadly, I think the volatility in the futures markets actually serves to do the exact opposite of what futures markets were designed to do... This is about actually insulating producers from the supply shocks of a good harvest one year and a bad harvest next year. Now suddenly, this has become distorted by speculators, who are speculating on the price of Arabica and Robusta...that have no intention of ever taking delivery of a single bean."

Specialty Coffee is characterized not only by a higher standard of intrinsic production systems but also aims to provide better traceability of the origin and has a socially constructed orientation towards more sustainable production standards, which increase the extrinsic production valuation. Given that consumers are increasingly opting for higher-quality and more sustainably-produced coffee (Giovannucci, 2001), it is remarkable that none of the product features that provide evident differentiation are consolidated within the price of Arabica coffee and that for premium coffee, it still serves as a compass during the valuation process. Both Olisipo and Primavera indicated that there is also logic to this in affiliation between the C-Market and Specialty Coffee valuation because the market still functions as an alternative form of distribution to direct-trade by roasters or aggregated direct-trade through transparent green bean traders. Opting for the former often entails a lower commitment in terms of time and resources. Moreover, when the C-Market price is considered high, and the premium to Specialty Coffee shrinks, these factors combined could incentivize Specialty Coffee producers to cut their losses and sell their products on the C-Market. Opting for this distribution channel will lead to a lower-quality product, both in terms of intrinsic as well as extrinsic production systems. Given that these coffees are often blended across multiple origins, both the transparency within the supply chains and the original taste attributes of the flavor profile are reduced. Furthermore, the flavor profile becomes too complex and unbalanced that it requires dark or extremely dark roasting profiles. The darker the roast, the more it eliminates the bean's original flavor, which is associated with lower-grade coffees.

d. Increase the Willingness of both Private and Public Investments to build a Resilient (Specialty) Coffee Industry

To transition our valuation processes, Collective Action became a popular concept within the Specialty Coffee sector. This is partly due to the threat that the climate crisis poses to the entire industry but specifically to specialty and higher grade coffee. The evident effects of climate change already have enormous effects on the coffee industry, given its sensitivity to fluctuations in temperature and precipitation, which was one of the reasons for the extreme price volatility we have observed over past years.

Knowledge Development Manager at the Specialty Coffee Association:

"We are living in a world right now where we have very high coffee prices, but it is really just a peak amidst a valley of low prices, which is why we started, for example, the Price Crisis Response Initiative... The biggest challenge here is price because we think we can feel fine about the coffee price because it is so high right now, but at the same time, we are running out of coffee supply."

The mere exposure of being part of a collective that wants to transform the industry is aligned with consumers' increased demand for sustainable products (Giovannucci, 2001). However, without significant investments in the industry to promote innovation and define clear standards concerning production and trade, the impact of such initiatives will remain minimal.

Director Sustainable Coffee at Conservation International:

"The price tag of sustainability needs to go up... In research we did in 2016, we found that an estimated \$350 million was invested annually in sustainability in an industry that is worth 200 billion!... There needs to be more clarity on the cost of sustainability. What does it cost to make a systemic change? And to do this, it is crucial to make the distinction between what is competition and where do we work together."

e. Empower Producers by moving from a Value Chain to a Value Network

The intention of consumers and actors of the Specialty Coffee value chain to lead this systemic change is crucial to transforming the entire coffee industry, including commodity coffee. Therefore, governments and actors need to invest heavily in professionalizing the industry and building a foundation for sustainable coffee production and a scalable model for sharing knowledge and empowering the less powerful actors of the value chain.

During all interviews, the disparity of power and the unequal wealth distribution between actors was emphasized to be a crucial issue to be solved if the the industry is to be transformed. This leads us to the final target area, which was an overarching theme during the interviews, where

some participants specifically mentioned it, while others came up with examples that indirectly portrayed a similar vision. In order to transition towards more equally distributed value and create equitable partnerships along the value chain for Specialty Coffee, the idea of a **value network** was introduced, where producers play a more central role in this network and have a stronger position in the distribution of wealth.

Even though every analyzed case recognized the unfair distribution of wealth and power to be an issue, the question that remains is: what makes a distribution fair? This question was raised in 10 out of 11, illustrating the complexity of defining fair and incentivizing rewards. Fairchain stated that they believe that the profits generated during the value-adding activities should be split equally between actors in the country of production and actors in the country of consumption.

Building Inclusive Business Models at Fairchain Foundation:

"We decided that we want our margins to have a 50/50 share between the country of origin and the consuming country...to be able to do this, we first need to map out the entire value chain and then analyze the profit margins at every step... However, that 50% of the margin belongs to the farmers is, of course, a completely arbitrary number... An interesting question is: What should someone be earning?... Honestly, I don't know how to answer this question. We just hope that by the end of the day, these farmers can also put food on the table, rest, and spend time with their families."

According to Housh from the Specialty Coffee Association, due to the centralization of power in consuming countries, "producers still tend to be price-takers" instead of price-setters. This has led coffee-dependent countries and communities to be exploited for decades. Fairchain, the Specialty Coffee Association, Primavera, and others emphasized that in order for the coffee industry to remain viable, there should be more substantial incentives for actors in producing countries to remain active in the coffee industry. According to these organizations, it includes a fair and transparently set price for their product that enables producers to live a healthy, happy life and opens the door to the social and economic development of the coffee-producing community, and incentivizes the production of high quality and sustainable coffee. Some participants, such as Olisipo Coffee Roasters, believed that the farmer and country of origin

should be placed at the center of power and wealth distribution. It introduced the theory of transitioning the coffee industry from a value chain to a value network, as Kothandaraman and Wilson theorized in systemic change theory (2001).

Co-Founder at Olisipo Coffee Roasters:

"One of the prevailing injustices of the global coffee value chain is that the majority of producers do not get to taste their own coffee... The more power, knowledge, and education are concentrated in the hand of the producer, and with access to information, the better we can empower the producer. By for example having sample roasting and QC labs at origin...in order for them to taste their own coffee. I'd like to see the coffee value chain as something that is non-linear...and to have the producer in the middle of it because that's where most of the value is being created."

During the research, it became evident that there was no shortage of ideas on how to create more equitable relationships to guarantee a fairer distribution of wealth and power. Watson from Olisipo Coffee Roaster, for example, posed the idea of sample roasting and quality control facilities at origin in order to empower the producer to actually be able to drink their own coffee at its finest quality and reduce dependency on external actors. Moreover, Housh from the Specialty Coffee Association introduced the idea of literally giving producers a seat at the table by including them on the board of corporations to guarantee their ability to represent their needs.

Discussion

The coffee industry is at risk, and enormous obstacles, such as the unequal wealth and power distributions, environmental crises caused by climate change, and the effects of extreme price volatility are blocking the path to a sustainable and viable coffee industry. Levy et al. illustrated the importance of the role that civil society and organizations play and the responsibility of the government to construct the appropriate value regime to regulate and control transactions (2016). This approach is fundamentally in line with the presence of Collective Action that was observed in the Specialty Coffee industry. On the contrary, Collective Action emphasizes the responsibilities of typically competing organizations to unite for the industry's greater good. Collective Action was found to precipitate systemic change, which is in line with research by Senge et al., which highlighted the need for cross-sectional collaboration across the industry to bring about the systemic transformations required to stop climate change (2007).

Despite the lack of academic research on specialty or higher-quality coffee valuation processes, it seems like benchmarks, standards, and processes are socially constructed and widely adopted across the industry. Nevertheless, to safeguard against unethical practices further formalization of these processes is required. Given that the Specialty Coffee industry is merely a small fraction of the commodity-coffee industry, Collective Action should focus on educating all actors within the industry, including consumers, regarding best-practices for production and consumption. By spreading information, consumers will be able to make educated decision about what they want to consume in terms of product quality and sustainability practices, and decide what these value categories are worth to them.

During the study, it was discovered that the role of transparency could not be understated as it often acted as an inhibiting factor for effective transactions to take place along the value chain. Specialty Coffee producers attempt to counteract it by implementing technologies, direct-trade, vertical integration, long-term equitable partnership, and the professionalization and standardization of processes to build a more transparent industry. The "Value Problem" explored by Reineke & Ansari subscribes to reasoning by stating the necessity of valuation processes for the successful functioning of the market (2012). After analyzing different actors in the specialty coffee market, the findings depicted an environment where the demand for sustainable and

high-quality coffee is rising. However, producers do not receive sufficient compensation for producing higher-quality products due to a lack of transparency (or asymmetrical information) embodied by traceability and measurability. The investment associated with producing specialty-grade coffee is higher than commodity-grade coffee as it is a more resource-intensive process, which is known as moral hazard (Marshall, 1976). Therefore, producers are discouraged from producing a higher-quality product, both in terms of intrinsic and extrinsic value. The environment described above showed resemblance to another theoretical framework by Akerlof that explained how quality uncertainty due to asymmetrical information could lead to adverse selection in which only lower-quality products remain in the market, which was coined The Market for Lemons (1970). The potential presence of The Lemon Problem ought to be further discovered in future research as this could be at the core of the unequal distribution of wealth and, therefore, power among actors in the specialty and commodity coffee markets. If producers are to be fairly compensated for their investments and the associated risk, the industry should aim to decouple the valuation process of high-grade coffee from the valuation processes of the C-Market (C-Price for Arabica coffee). In the case of high-grade coffee, legacy value system should be replaced by more sophisticated valuation processes, such as the quality-grading framework by the SCA.

Eventually, the intention to position the producer as a more integral part of the value network was vigorously endorsed by different actors. The manner of reaching this goal is still open for discussion, yet, the fact that there are new initiatives arising frequently and are focused on empowering the producer, both through Collective Action or individual programs, illustrates that different actors within the Specialty Coffee Value Network have realized the need for systemic change. Nevertheless, significant investments are required by governments and organizations in order to facilitate the systemic change that is sought. Hopefully, this change will ignite efforts and initiatives in adjacent industries such as commodity-traded coffee to revolutionize the industry and create a viable coffee sector for all. This could accelerate the next paradigm shift in the coffee industry, entering The Fourth Wave era where the industry transitions from Quality Awareness to Sustainability Awareness. During this transition, the effective valuation of extrinsic production systems through a transparent value network could build a healthier coffee industry.

Conclusion

To conclude, this research aimed to answer the following research question: *How can actors of the Specialty Coffee industry construct valuation processes for a more equal distribution of value?*. Its findings provided promising trends and actions from the perspective of Valuation Theory for Specialty and Commodity Coffee, which could prove a valuable starting point for future research. Given the lack of previous systemic research of an exploratory nature, this study analyzed the entire value chain of Specialty Coffee to understand the differences in perspective, interactions, and conflicting interests of different actors within this value chain.

One of the research contributions was the further formalization of the socially constructed processes to improve visibility and measurability within the Specialty Coffee value chains. On the one hand, it found that actors operating along the Specialty Coffee value chain remained close to the initial definition of Specialty Coffee by avoiding mass-production and focussing on the traceability of their product which in turn improved measurability. On the other hand, as this segment still only accounts for a small fraction of the overall coffee industry, organizations operating in the Specialty Coffee segment are small compared to the sizeable lower-grade coffee retailers. This complicates the discovery of secondary data as less public data was available with regard to analyzed organizations in the Specialty Coffee segment. By researching, for example, quality valuation processes or sustainability practices, we can further contribute to formalizing this segment and help improve measurability within these value chains.

Another limitation of the research is the limited diversity of analyzed markets due to the available resources of the researcher. This limitation is twofold: on the one hand, most interviews were organized and facilitated through the personal network of the researcher, which affected the diversity of the sample and, therefore, the transferability of its findings to other large coffee-consuming markets such as the United States or Japan. On the other hand, the threat of response bias should be taken into account as the mere willingness of organizations to accept participation in the interviews could indicate that actors are optimistic about their performance regarding effective valuation and sustainable operations. To counteract the potential response bias, this study included interviews with industry experts and non-profit organizations who are

less likely to be affected by these conflicting interests and are more likely to answer critical questions about the industry truthfully.

During the data collection process, it became clear that both the evaluation of quality production processes as well as the social and environmental production are highly country-specific. Antony Watson from Olisipo interestingly illustrated: "Why would we use a washed processing method for our coffee beans in Africa if so many people do not even have access to clean drinking water.", or as Kieran Green from Bocca indicated: "There is a lot of violence and conflict in Ethiopia due to surges in price which make it extremely difficult to get the coffee out of the country, but if you, for example, look at Kenya, there are many issues with corruption which makes it very hard to get the right people to benefit from the price premiums we paying.". These two citations illustrate the importance of further research on the needs and issues in specific countries of origin to better educate the consumers on the externalities of their consumption. However, in this research, we have aimed to provide a more holistic view of the intrinsic and extrinsic valuation of Specialty Coffee in order to provide a context in which Collective Action can lead to systemic change.

The intention for Collective Action was directed at democratizing the coffee industry and building a value system that more equally distributes value among the actors within both coffee-consuming and coffee-producing countries. The role of transparency cannot be understated as it facilitates the effective transactions between those actors. The study found indication that the evident "Value Problem" could lead to inefficient transaction and ultimately an inefficient market (Reinecke & Ansari, 2012), where demand for sustainable Specialty Coffee rises, yet there is too little incentive for farmers to supply these products (as previously compared to The Lemon Problem). Therefore, future research could focus on constructing these inefficiencies and collecting macro-economic data to validate this indication. In the end, the increased demand for high-quality and sustainable coffee, given a fair distribution of wealth, could be a means of development for coffee-producing communities and could pave the way to social, environmental, and economic development.

Bibliography

- Aequitas Coffee. About us. (retrieved: 2022), <https://www.aequitascoffee.com/aboutus>
- Akerlof, G. A. (1970). The market for “lemons”: Quality uncertainty and the market mechanism. In *Uncertainty in economics* (pp. 235-251). Academic Press.
- Barbaroux, P. (2014). From market failures to market opportunities: Managing innovation under asymmetric information. *Journal of Innovation and Entrepreneurship*, 3(1), 5. <https://doi.org/10.1186/2192-5372-3-5>
- Boltanski, L., & Thévenot, L. (2006). *On justification: Economies of worth* (Vol. 27). Princeton University Press.
- Camarero Izquierdo, C., & Gutiérrez Cillán, J. (2004). The interaction of dependence and trust in longterm industrial relationships. *European Journal of Marketing*, 38(8), 974–994. <https://doi.org/10.1108/03090560410539122>
- Daviron, B., & Ponte, S. (2005). *The Coffee Paradox: Global Markets, Commodity Trade and the Elusive Promise of Development*. Zed Books.
- Fitter, R., & Kaplinksy*, R. (2001). Who Gains from Product Rents as the Coffee Market Becomes More Differentiated? A Value-chain Analysis. *IDS Bulletin*, 32(3), 69–82. <https://doi.org/10.1111/j.1759-5436.2001.mp32003008.x>
- Fourcade, M. 2011. Cents and Sensibility: Economic Valuation and the Nature of “Nature.” *American Journal of Sociology*, 116(6): 1721-77.

de Freitas Netto, S. V., Sobral, M. F. F., Ribeiro, A. R. B., & da Luz Soares, G. R. (2020). Concepts and forms of greenwashing: A systematic review. *Environmental Sciences Europe*, 32(1), 1-12.

Gerbens-Leenes, P. W., Moll, H. C., & Schoot Uiterkamp, A. J. M. (2003). Design and development of a measuring method for environmental sustainability in food production systems. *Ecological Economics*, 46(2), 231–248.

[https://doi.org/10.1016/S0921-8009\(03\)00140-X](https://doi.org/10.1016/S0921-8009(03)00140-X)

Giovannucci, D. (2001). Sustainable coffee survey of the North American specialty coffee industry.

Giovannucci, D., & Ponte, S. (2005). Standards as a new form of social contract? Sustainability initiatives in the coffee industry. *Food Policy*, 30(3), 284–301.
<https://doi.org/10.1016/j.foodpol.2005.05.007>

Giovannucci, D., & Koekoek, F. J. (2007). *The State of Sustainable Coffee: A Study of Twelve Major Markets* (SSRN Scholarly Paper ID 996763). Social Science Research Network. <https://papers.ssrn.com/abstract=996763>

Hamprecht, J., Corsten, D., Noll, M. and Meier, E. (2005), "Controlling the sustainability of food supply chains", *Supply Chain Management*, Vol. 10 No. 1, pp. 7-10.
<https://doi.org/10.1108/13598540510578315>

Juma, H., Shaalan, K., & Kamel, I. (2019). A Survey on Using Blockchain in Trade Supply Chain Solutions. *IEEE Access*, 7, 184115–184132.
<https://doi.org/10.1109/ACCESS.2019.2960542>

- Kelley, H. H., & Michela, J. L. (1980). Attribution theory and research. *Annual review of psychology*, 31(1), 457-501.
- Knutsen, E. (1973). Specialty Coffee. *Tea & Coffee Trade Journal*.
- Kothandaraman, P., & Wilson, D. T. (2001). The future of competition: value-creating networks. *Industrial marketing management*, 30(4), 379-389.
- Laderach, P., Lundy, M., Jarvis, A., Ramirez, J., Portilla, E. P., Schepp, K., & Eitzinger, A. (2011). Predicted impact of climate change on coffee supply chains. In *The economic, social and political elements of climate change* (pp. 703-723). Springer, Berlin, Heidelberg.
- Levy, D., Reinecke, J., & Manning, S. (2016). The Political Dynamics of Sustainable Coffee: Contested Value Regimes and the Transformation of Sustainability. *Journal of Management Studies*, 53, 364–401. <https://doi.org/10.1111/joms.12144>
- Macrotrends.net. MacroTrends - Charting Global Markets and Economies. Coffee Prices—45 Year Historical Chart., (retrieved: 2022), <https://www.macrotrends.net/2535/coffee-prices-historical-chart-data>
- Marshall, J. M. (1976). Moral hazard. *The American Economic Review*, 66(5), 880-890.
- Marx, K. 1930. *Capital*. Translated from the German Edition by Eden & Cedar Paul. Original. Publication in 1867. London: J.M. Dent & Sons Ltd.

Maurice, N. E., & Davis, J. (2013). *Unraveling the underlying causes of price volatility in world coffee and cocoa commodity markets*. 39.

Maytaal, A., & Teixeira, M. (2019). Quality Coffee Shortage Trips up Funds to Send Prices Soaring. Reuters, April 5, 2019.
<https://www.reuters.com/article/coffeesupplies/quality-coffee-shortage-trips-up-funds-to-sendprices-soaring-idUSL8N28F4I2>.

Menger, C. (2007). *Principles of Economics*. Alabama: Ludwig von Mises Institute, (Orig. pub. 1871).

Papista, E., Chrysochou, P., Krystallis, A., & Dimitriadis, S. (2018). Types of value and cost in consumer–green brands relationship and loyalty behaviour. *Journal of Consumer Behaviour*, 17(1), e101–e113. <https://doi.org/10.1002/cb.1690>

Porter, M. E., and Kramer, M. R. (2011). Creating Shared Value. *Harvard Business Review*.

Porter, M. E. (1985). *The Competitive Advantage: Creating and Sustaining Superior Performance*. NY: Free Press.

Purvis, B., Mao, Y. & Robinson, D. Three pillars of sustainability: in search of conceptual origins. *Sustain Sci* 14, 681–695 (2019). <https://doi.org/10.1007/s11625-018-0627-5>

Reinecke, J. (2010). Beyond a subjective theory of value and towards a ‘fair price’: An organizational perspective on Fairtrade minimum price setting. *Organization*, 17(5), 563–581. <https://doi.org/10.1177/1350508410372622>

Reinecke, J., & Ansari, S. (2012). The Politics of Value: The work of value entrepreneurs in shaping categories. *Academy of Management Proceedings*, 2012(1), 11645.

<https://doi.org/10.5465/AMBPP.2012.320>

Reinecke, J., Manning, S., & Von Hagen, O. (2012). The emergence of a standards market: Multiplicity of sustainability standards in the global coffee industry. *Organization studies*, 33(5-6), 791-814.

Rosenberg, L., Swilling, M., & Vermeulen, W. J. V. (2018). Practices of Third Wave Coffee: A Burundian Producer's Perspective. *Business Strategy and the Environment*, 27(2), 199–214. <https://doi.org/10.1002/bse.2010>

Roseberry, W. (1996). The rise of yuppie coffees and the reimagination of class in the United States. *American Anthropologist* 98(4): 762–775.

Ross, M. (1999). The Political Economy of the Resource Curse. *World Politics*, 51(2), 297-322. doi:10.1017/S0043887100008200

Salomone, R. (2003). Life Cycle Assessment applied to coffee production: Investigating environmental impacts to aid decision making for improvements at company level. *Journal of Food Agriculture and Environment*, 1, 295–300.

Senge, P. M., Lichtenstein, B. B., Kaeufer, K., Bradbury, H., & Carroll, J. S. (2007). Collaborating for systemic change. *MIT Sloan management review*, 48(2), 44.

SCA (2021). Towards a Definition of Specialty Coffee: Building an Understanding Based on Attributes. Report, Specialty Coffee Association.

- SCA (2019). Price Crisis Response Initiative. Summary of Work. *Specialty Coffee Association*. Updated May, 2020. Available at:
https://static1.squarespace.com/static/584f6bbef5e23149e5522201/t/5ebd4d5f1e9467498632e0b8/1589464434242/AW_SCA_PCR_Report2020+-+December+2019+-+Update+May+2020.pdf
- Sepúlveda, W. S., Chekmam, L., Maza, M. T., & Mancilla, N. O. (2016). Consumers' preference for the origin and quality attributes associated with production of Specialty Coffees: Results from a cross-cultural study. *Food Research International*, 89, 997–1003. <https://doi.org/10.1016/j.foodres.2016.03.039>
- Stark, D. 2009. *The Sense of Dissonance: Accounts of Worth in Economic Life*. New Jersey: Princeton University Press.
- Tran, H. T., Lee, L. S., Furtado, A., Smyth, H., & Henry, R. J. (2016). Advances in genomics for the improvement of quality in coffee. *Journal of the Science of Food and Agriculture*, 96(10), 3300–3312. <https://doi.org/10.1002/jsfa.7692>
- Light, M. P. (2019). Trish Rothgeb coined 'third wave' — and is now looking toward coffee's future. *Los Angeles Times*.
<https://www.latimes.com/food/story/2019-10-04/third-wave-coffee-trish-rothgeb>
- Utrilla-Catalan, R., Rodríguez-Rivero, R., Narvaez, V., Díaz-Barcos, V., Blanco, M., & Galeano, J. (2022). Growing Inequality in the Coffee Global Value Chain: A Complex Network Assessment. *Sustainability*, 14(2), 672. <https://doi.org/10.3390/su14020672>
- Walters, D. and Lancaster, G. (2000), "Implementing value strategy through the value chain", *Management Decision*, Vol. 38 No. 3, pp. 160-178.
<https://doi.org/10.1108/EUM00000000005344>

Weatherspoon, D., & Donnet, L. (2007). *The Specialty Coffee Quality Rating as a Measure of Product Differentiation and Price Signal to Growers: An Entropy Analysis of E-Auction Data*.

(Nel) Wognum, P. M., Bremmers, H., Trienekens, J. H., van der Vorst, J. G. A. J., & Bloemhof, J. M. (2011). Systems for sustainability and transparency of food supply chains – Current status and challenges. *Advanced Engineering Informatics*, 25(1), 65–76. <https://doi.org/10.1016/j.aei.2010.06.001>

Appendices

a. Data Analysis - Constructed Codes & Definitions

Theoretically Constructed Codes	Applied Definitions	Empirically Constructed Codes	Applied Definitions
Fundamental Attribution Error (FAE) (Kelley & Michela, 1980)	Tendency of consumers to underemphasize the effects of the environment on the experience of a product, in this case, coffee.	Subjectivity of Taste (Olisipo, 2022)	The idea that taste is subjective and influenced by, for example, cultural background or personal experiences.
Centralization of power in consuming markets (SCA, 2019)	The unequal division of power leads to a situation in which actors along the value chain are more or less influential. This is, for example, visible when farmers end up being price-takers instead of price-setters.	Consistency of Quality (Fairchain Foundation, 2022)	The ability to keep the quality of coffee constant despite the sensitive nature and manual processing of high-quality coffee.
Product Differentiation (Weatherspoon & Donnet, 2007)	The ability to offer coffee with different production and brewing methods, which sets it apart from competing products in the market and allows actors to enjoy differentiation premiums.	Abandonment of the Coffee Industry (PRIMAVERA, 2022)	The occurrence that younger generations abandon the coffee industry due to its inviability and unequal wealth distributions.
Multi-Directional Shared Learning (PRIMAVERA, 2022)	A process during which learnings are shared both up and down the value chain to improve overall quality or efficiency.	Consistent Quality Control (Torra Coffee Roasting, 2022)	The ability to keep the quality of coffee constant despite the sensitive nature and processing of high-quality coffee.
Standardized Quality Grading (SCA, 2021)	The ability to objectively evaluate the coffee quality in a standardized fashion and therefore contribute to the overall valuation process.	Educating Consumers on Quality (Combi Coffee Roasters, 2022)	The ability of an actor to educate consumers on the enjoyment of high-quality and sustainably-produced coffee and justify a higher price premium.
(Lack of) Regulation & Oversight	The presence of governmental control and interference to commit to sustainable production standards throughout the entire coffee value chain and	Seasonality of Harvesting Cycles	The risky role of coffee producers due to the seasonality of harvest, which generally only occurs once per year, increases the degree of moral hazard for

(Conservation International, 2022)	to actively uphold said standards.	(Nanetti, 2022)	farmers.
Misinformation / Greenwashing (de Freitas Netto et al., 2020)	An act of a company presenting itself as more sustainable than is the case by stating untruthful claims and motivations.	Balancing of Quality and Sustainability (Damn Good Coffee Company, 2022)	The necessity to explore lower-grade alternatives to specialty coffee due to their stronger resilience to extreme weather conditions and precipitation, associated with climate change.
CDDC: Resource Curse (Maurice & Davis, 2013) & (Ross, 1999)	Countries that are highly dependent on a specific commodity and are adversely affected by its availability.	Investing at Origin (Fairchain Foundation, 2022)	The attempts of actors in consuming countries to improve the production processes of coffee-producing actors. This enhances the quality and consistency of harvests that enable farmers to earn more for their crops.
Climate Crises & Price Volatility (Olisipo, 2022)	Global warming increases the number of climate crises producers face, making harvest cycles more vulnerable and prices more volatile.	Respect for Historical Precedent (SCA, 2021)	The degree to which the origin of coffee production is being respected by, for example, emphasizing its natural flavors and allowing more value to remain in producing countries.
(Lack of) Systemic Change (Senge et al., 2007)	The holistic analysis of systems and the assessment of actions to bring about structural, long-term change to, for example, the coffee industry over a longer period of time.	From Value Chain to Value Network (Kothandaraman and Wilson, 2001)	The reassessment of value-adding activities as a network as opposed to a sequential process.
Long-term Partnerships (Trust) (PRIMAVERA, 2022)	Actors that directly interact along the coffee value chain, and depend on each other's value-adding activities. Lasting, trustful relationships improve the valuation process and business transactions.	Equitable Relationship (SCA, 2022)	A relationship that is both long-term and mutually beneficial and is based on mutual trust and understanding.
Vertical Integration & Crop to Cup (Control) (Bocca Coffee, 2022)	The degree to which one actor is responsible for or facilitates multiple or even all value-adding activities along the coffee value chain.	Educating Consumers on Sustainability (Bocca Coffee, 2019)	The ability of the organization to communicate clearly and transparently why it is essential to buy sustainable coffee and justify a higher price.
Unequal Distribution of Wealth	The degree to which the generated value is divided equally among the actors of the value chain and between the producing and consuming countries.	The Fourth Wave: From Quality Awareness to Sustainability Awareness	The expected transition in the coffee industry from a niche segment that enjoys specialty-grade coffee to the adoption of the general public. It includes the adoption of specialty or higher-

(Wognum et al., 2011)		(Damn Good Coffee Company, 2022)	quality coffee and the awareness of sustainable and transparent production practices.
Direct-Trade (Torra Coffee Roasting, 2022)	The situation in which actors of the coffee value chain in consuming countries, such as roasters and retailers, have direct access to and relationships with coffee farmers.	Overarching Sustainability Certification (Damn Good Coffee Company, 2022)	The over-supply of specialized certifications and the lack of regulation and control in the field of sustainability introduced the idea of one generic sustainability standard that summarizes the overall performance of an organization.
(Lack of) Measurability (Damn Good Coffee Company, 2022)	The ability to measure the impact of sustainability initiatives during the production stage of coffee.	Collective Action (Bocca Coffee, 2022)	The ability to collaborate among different, sometimes competing, actors within the same industry to set standards for sustainability and quality and bring about a positive systemic transition.
(Lack of) Traceability (Damn Good Coffee Company, 2022)	The ability to trace products and their value-adding activities along the value chain.	Access to Sustainability Certifications (Conservation International, 2022)	The difficulty for smallholder farms to access sustainability certifications due to the significant required investments. This places such farms outside the market and incentivizes them to produce lower-grade and less sustainable coffee.
Asymmetrical Information (Akerlof, 1970)	A situation where actors along the value chain do not possess the same information which can inhibit effective transactions due to a lack of trust.	Transparent Pricing (PRIMAVERA, 2022)	The ability to break down the kilo price of coffee based on incurred costs along the value chain and the quality of a product leading to more transparent pricing and value distribution.
Moral Hazard (Marshall, 1976)	A situation where actors along the value chain do not face the same degree of risk which can inhibit effective transactions due to the apparent unequal power distribution.	Sustainable Aggregators (Nanneti, 2022)	Green bean traders that focus on high-quality and sustainably-produced coffee and enable small retailers and roasters by aggregating their demand and offering specialty-grade attributes such as traceability and transparency to actors that otherwise would not have such resources.
		Crop Diversification (Elion, 2022)	The ability of farmers to hold multiple types of crops to diversify the risk associated with producing the sensitive coffee crop, especially in light of climate crises.

b. Data Analysis - Coding Table & Data Triangulation

Analyzed Case Studies

- A. Damn Good Coffee Company (2018)
- B. Bocca Coffee (2001)
- C. Olisipo (2018)
- D. Torra Roasting & Coffee (2018)
- E. Combi Coffee Roasters (2014)
- F. PRIMAVERA (2013)
- G. Fairchain Foundation (2012)
- H. Conservation International (1987)
- I. Specialty Coffee Association (1982 - SCAA)
- J. Industry Expert - Tanya Nanetti
- K. Industry Expert - Vivian Elion

Code (37)	Cases (A - K)	Citation (2 exemplary citations)
Fundamental Attribution Error (FAE)	B, C, D, E, F	<p>Co-Founder at Olisipo (2): Coffee taste is very subjective as it is significantly influenced by one's cultural background and what you are used to in terms of flavor. One coffee might taste entirely different for you than for me. It depends on my mood, on what I ate before, on the season we are in, and even on the time of the day.</p> <p>Community & Sustainability Coordinator at Bocca Coffee: As humans, we are inherently biased... It's kind of like the taste in science: finding nuances in flavor but also moving towards a world of measurability and precision. A part of it should also be about experience and what you genuinely like as a consumer. If we get too focussed on measuring everything, we forget that part of the product is actually about enjoying it.</p>
Centralization of power in consuming markets	B, C, E, F, G, I, J, K	<p>Co-Founder at Olisipo (1): The potential that exists around coffee is decentralization through, for example, blockchain technology. We need to break the stranglehold of the 6 or 7 trading houses that have huge power in terms of coffee price, logistics, and in terms of how that coffee is moved around the world. And also change who controls this information. This information is proprietary, and these actors will not let it out of their old legacy system of trade that was born out of the ashes of the colonial age.</p>

		<p>Knowledge Development Manager at the Specialty Coffee Association: The reason why coffee exists today is because of colonization...the quality scale is meant to bring people to the table, but there is still this power imbalance at play... If we can say: this is a 90-point coffee, and we can talk it through, this can be illuminating to all parties... but when talking about pricing and valuation, people in producing countries still tend to be price-takers.</p>
Product Differentiation	A, B, D, E, G, J	<p>Owner & Co-Founder at Combi Coffee Roasters: Coffee is one thing that people really need...but in this industry, you always learn something new: the use of different temperatures, new coffee varieties, brewing methods, interesting flavor profiles, and different countries of origin. We need to keep offering diversified products in order to keep people interested and surprise them with everything coffee has to offer.</p> <p>Community & Sustainability Coordinator at Bocca Coffee: Filter coffee and slow coffee have gone full circle...It is really nice to see this coming back as it really is the best way to experience the diversity and full flavor range of the product. There is also more emphasis on specialism: high-quality coffee, different varieties of coffee, processing methods, sub-region varietals, and fermentation methods.</p>
Multi-Directional Shared Learning	A, C, D, E, F, G, I, J	<p>Co-Founder at Damn Good Coffee Company: For me, when we have direct relationships and we can focus on education, we need to do it in a way that can be copied by others because otherwise, our sustainability efforts are not gonna have any effect on the sector. If we can build frameworks or educational programs that 80% of the industry can adopt, then we are getting somewhere... This process will start with learning from farmers so we can all share best practices with the industry.</p> <p>Knowledge Development Manager at the Specialty Coffee Association: I think our value is always going to be in the convening power... If you talk to traders, roasters, or other actors (along the value chain), you see that they all live in a bubble... When it comes to wanting to discuss big issues, it is not always easy to turn around and ask: Can we talk about this? Because it feels a bit competitive. The SCA has always been able to bring people together, both for formal topics such as price crises...or farmworker rights, but also just through our events...because it is also about pushing the industry forward.</p>
Standardized Quality Grading	A, C, D, I, J	<p>Co-Founder at Olisipo (1): To assess quality, we need to look further than the price for a bag and the points on a hedonic scale. It is about how the quality of coffee is being preserved from one link to the next in the value chain, and we are talking about commercial-grade coffee as well as specialty. Commercial-grade coffee still accounts for like 95% of the world trade, so if we want to change world trade, we need to deal with the commercial commodity and not keep ourselves to the notion that specialty equals good, and commercial-grade coffee equals bad.</p> <p>Knowledge Development Manager at the Specialty Coffee Association: It is important because it helps us have this common language (quality scale) because how else do you value coffee? How do you come to the table and have a language that your farmer, your producer, the person who is processing, and your exporting can use in order to say: This is why we want to buy this</p>

		coffee?... But we don't enforce it... because we are not here to police, we are here to bring people together.
(Lack of) Regulation & Oversight	A, B, C, F, G, H, I, J	<p>Community & Sustainability Coordinator at Bocca Coffee: Every roaster claims to be sustainable, and every roaster claims to be paying their fair wage, but there is not enough to keep these claims accountable... Regulation works to some extent. In terms of, for instance, Fairtrade or other certifications, it allows for a low-level benchmark...but with Collective Action and cohesion, we can put pressure on the low-cost models that we often see, for example, in B2B.</p> <p>Director Sustainable Coffee at Conservation International: Governments, as well as companies, need to acknowledge that there are problems in the coffee value chains and take their responsibility. Things such as child labor, deforestation, and labor laws are real problems. Given that the EU is the largest coffee-consuming market in the world, it should play an important role in defining the minimum threshold on sustainability for the products sold in the European market. Then you can let companies compete based on a level playing field. That is perfectly fine! But it should always be above this minimum standard. You should not be able to start competing by claiming things like that your value chain is free of child labor or deforestation. It's 2022! This should not even be an argument anymore.</p>
Misinformation / Greenwashing	A, C, D, F, G, I, J, K	<p>Customer Relations Manager at PRIMAVERA COFFEE: Roasters often look for partners that fit their perspective of sustainability... Transparency is what roasters are asking for and often expect, but it is often added more as a marketing gimmick than that they actually do something sustainable with it. For many roasters, it is a marketing stamp to be able to sell it as Specialty Coffee... We have clients that take it very seriously and really want these direct relationships with farmers, but there are others that use it mostly as a marketing story.</p> <p>Co-Founder at Olisipo (2): Many companies want to benefit from the interest around Specialty Coffee and claim how sustainable they are without actually doing anything. Greenwashing is a big problem. Consumers need to be educated to better understand these sustainability claims.</p>
CDDC: Resource Curse	B, F, G, I, J, K	<p>Community & Sustainability Coordinator at Bocca Coffee: The issues are very country-specific: There is a lot of ongoing conflict in Ethiopia, which creates great friction in terms of trying to get the coffee out of the country... Whereas if you go to Kenya, the main problem is corruption, and there it is really about trying to get that money to the people that really produce the coffee and the smallholders... What that means for resource dependencies - if you have more of a commodity, it is going to be damming on how much you actually make of it... Having a commodity dependence can often be the core of social issues.</p> <p>Knowledge Development Manager at the Specialty Coffee Association: We are living in a world right now where we have really high coffee prices, but it is really just a peak amidst a valley of low prices, which is why we started, for example, the Price Crisis Response Initiative. Coffee exists today because</p>

		<p>we were looking at how to create a better livelihood for millions of people around the world, and we're really hitting up against the wall of - maybe coffee isn't the answer...and it is really hard for someone in the coffee industry to come to terms with this... The biggest challenge here is price because we think we can feel fine about the coffee price because it is so high right now, but at the same time, we are running out of coffee supply.</p>
Climate Crises & Price Volatility	A, B, C, D, E, F, G, I, J, K	<p>Co-Founder at Olisipo (1): We are still connected to these old legacy price systems, such as the New York C-Market. Sadly, I think the volatility in the futures markets actually serves to do the exact opposite of what futures markets were designed to do... This is about actually insulating producers from the supply shocks of a good harvest one year and a bad harvest next year. Now suddenly, this has become distorted by speculators, who are speculating on the price of Arabica and Robusta...that have no intention of ever taking delivery of a single bean.</p> <p>Owner & CEO at Torra Roasting & Coffee: Price volatility is a huge problem... This year was a hard year for coffee because of the extreme frosts in Brazil, which are caused by climate change. This puts harvests at risk and dramatically reduces the volume of coffee that is in supply... Consumers don't understand why prices increase, and they are price-sensitive. So they could then decide to move towards lower-quality coffee.</p>
(Lack of) Systemic Change	C, G, H, I, K	<p>Director Sustainable Coffee at Conservation International: The price tag of sustainability needs to go up... In research we did in 2016, we found that an estimated \$350 million was invested annually in sustainability in an industry that is worth 200 billion!... There needs to be more clarity on the cost of sustainability. What does it cost to make a systemic change? And to do this, it is crucial to make the distinction between what is competition and where we work together.</p> <p>Industry Expert - Vivian Elion: Personally, I stopped using the word sustainability for a while now because, for me, the actual goal should be fundamental (systemic) change... Innovation with regards to, for example, the packaging is useful, but this is an incremental improvement and will not change the industry... So the question should be: How can we, in 20 years, look back and be happy with the transitions we stimulated?... And I believe for this to work, we need Collective Action because the responsibility cannot lay with only the government, the companies, or the consumer.</p>
Long-term Partnerships (Trust)	A, B, C, D, E, F, G, I, J	<p>Community & Sustainability Coordinator at Bocca Coffee: When you work directly with farmers, you can build relationships. That means you are able to see what is happening in origin locations... For instance, price negotiations are more of a discussion that is two-ended...to have more interesting, substantiated, and important conversations where you can listen to the requirements of the people you work with, and that is reflected throughout the supply chain... For instance, Menno (Founder of Bocca & Trabocca) actually calls some of our farmers his family; he goes to origin a lot and tries to be invested at every stage of production.</p> <p>Customer Relations Manager at PRIMAVERA COFFEE:</p>

		<p>We often work with partner producers that we have worked with for years and with whom we have really strong relationships, which definitely improves the valuation process of the product... But when the C-price is going up, we still see that farmers sometimes start negotiations for better deals even though we are already paying them a large premium.</p>
Vertical Integration & Crop-to-Cup (Control)	A, B, D, F,	<p>Customer Relations Manager at PRIMAVERA COFFEE: We control basically all steps from the moment the coffee is being produced at the farm until it is in our warehouse... Because La Central is our sister organization, we have a large team in Guatemala, including agronomists that visit producers and help share best practices on production... This is where the pursuit of quality already starts.</p> <p>Community & Sustainability Coordinator at Bocca Coffee: We are the first Specialty Coffee company in the Netherlands to manage the entire crop to cup process. We have relationships with farmers in origin, and we facilitate every step involved in the procedure of getting that cup of coffee in your hand.</p>
Unequal Distribution of Wealth	A, B, C, D, E, F, G, I, J, K	<p>Co-Founder at Olisipo (1): We have to deconstruct the notion of what value is... The share of value should do more than just put food and clean water onto the table for this coffee-producing family, and sadly that is what it just does at this point in time, and sometimes it does not even do that... From a socio-economic point of view, you can talk about it in terms of international development. In Ethiopia, for instance, many people still don't have access to clean drinking water, and how can coffee production help to change that... How is it going to make the lives of these producers better?... I saw with my own eyes the social-economic, health, and education benefits that Fairtrade, for instance, is bringing to coffee-growing communities.</p> <p>Building Inclusive Business Models at Fairchain Foundation: We decided that we want our margins to have a 50/50 share between the country of origin and the consuming country...to be able to do this, we first need to map out the entire value chain and then analyze the profit margins at every step... However, that 50% of the margin belongs to the farmers is, of course, a completely arbitrary number... An interesting question is: What should someone be earning?... Honestly, I don't know how to answer this question. We just hope that by the end of the day, these farmers can also put food on the table, rest, and spend time with their families.</p>
Direct-Trade	A, B, C, D, E, F	<p>Owner & CEO at Torra Roasting & Coffee: Due to the direct relationships we have with the farmers and the country of origin, we are able to offer more data and more transparency to our customers who like to know where their coffee comes from. This is a competitive advantage for us as other companies cannot quickly and easily build relationships like these.</p> <p>Co-Founder at Damn Good Coffee Company: And as we focus on Specialty Coffee, we try to follow the principle of direct-trade in order to have a closer relationship with the farmers we work with... We would like to be able to collect more data from the farms we work</p>

		<p>with or, in case they do not have this data yet, to help them collect more data, which would take a full season but would be the right way to do it.</p>
(Lack of) Measurability & Technology	A, B, C, D, G, K	<p>Co-Founder at Damn Good Coffee Company: There are farms and importers that have good stories but what is really missing is the data: there is no data available about any step in the production or export and what is hard is that there is no way for us to get to this data... What I would like to do is be able to do a proper life cycle analysis to then say: So we have been implementing these changes, now we can claim a certain reduction in CO2. But this is very difficult because you need to measure things like the amount of diesel that goes into a tractor every year or how much of the organic waste of the depulping farmers use as organic fertilizer for the next season. We know they do this, but obviously they do not put this on a scale and measure how many kilos they are spreading out over the field.</p> <p>Community & Sustainability Coordinator at Bocca Coffee: If I could change one thing about the industry, it is to guarantee a zero-tolerance policy against misinformation...and for that, we need transparency and measurability... There are so many claims in the market on what is a fair wage and what is sustainable, but if you can't back this up or if it is not measurable, it is pretty empty... That's why everything we do is measured and based on numbers in order to back up these claims and avoid giving empty information.</p>
(Lack of) Traceability	A, B, C, D, F, G, H, I, K	<p>Director Sustainable Coffee at Conservation International: We have an internal science team that is developing ways to measure sustainability at different levels and scales. Increasingly, this is done through remote sensing and the use of drones and even exploring the use of artificial intelligence, for example, to map and monitor deforestation... To scale these innovations and make them widely adopted, public and private actors need to invest in collaborative systems, tools, and methodologies.</p> <p>Building Inclusive Business Models at Fairchain Foundation: The advantage of applying blockchain technology is that the data cannot be manipulated, and that is what makes it controllable. However, if I lie and put faulty information into a blockchain to begin with, it will remain in this chain as if it was the one truth... To avoid this, we often still set up these chains ourselves, but eventually, we would like to move to a system where farmers can start it, and we only verify when needed.</p>
Asymmetrical Information	A, B, C, D, E, F, G, I, J, K	<p>Co-Founder at Damn Good Coffee Company: We trust farmers are doing the right things. But even though we know we are working with farms that are using best practices, like shade-trees and not using any synthetic fertilizer...they don't have the data to validate these claims, so it is just gonna stay a really good story.</p> <p>Building Inclusive Business Models at Fairchain Foundation: We want transparency and the fair distribution of wealth to become an industry-standard... There are lots of initiatives to make value chains more transparent and traceable because data is valuable. But we differentiate ourselves by not just providing the data but also helping with the implementation of projects to connect consumers to the product... Eventually, we want to go way further than just coffee. That's why the crop-to-cup concept</p>

		is not interesting for us because it would mean we limit our impact to one piece of land, which is not how we will realize systemic change itself.
Moral Hazard	A, B, C, E, F, G, H, I, J, K	<p>Director Sustainable Coffee at Conservation International: The requirements that come with the production of specialty coffee often also increase the costs for a farmer... For almost every quality standard, there is a market, which I think is a good thing. Investments to increase farmer income shouldn't only focus on increasing quality. In many cases, enhancing consistency and productivity is more critical to improving resilience. Also, we need to realize that every farmer and every coffee country is different.</p> <p>Co-Founder at Olisipo (1): We try to transition coffee production from being a cash crop...so that it is actually part of a much more bio-diverse source of income security. Because no one is going to produce anything if it is not profitable...and this helps to insulate the producers and mitigate their risks.</p>
Subjectivity of Taste	B, C, E, F, G, J	<p>Co-Founder at Olisipo (1): It opens the door to culture and ritual, as our sensory likings and preferences are based on where we are born and grew up. In a sense, this is super democratic because there are no wrong answers. In the end, the best cup of coffee is the one that we like.</p> <p>Building Inclusive Business Models at Fairchain Foundation: Coffee is the same as any other product where taste plays a decisive role, meaning that if you like the taste, it doesn't matter if the quality is high. Similarly, you cannot sell a product only by stating that the quality is high because consumers might simply not like the taste of it.</p>
Consistency of Quality	A, B, C, D, E, F, G, I, K	<p>Owner & Co-Founder at Combi Coffee Roasters: The big companies like Starbucks and Nestle roast enormous amounts of coffee. If you start roasting large volumes, the tumblers are so large that it is impossible to get the beans evenly and consistently roasted at a high quality. The less you roast, the more you can maintain consistent quality in the beans... For example, I do 5 kilos per roasting session, so without taking breaks, I can do a maximum of 150 kilograms per day.</p> <p>Community & Sustainability Coordinator at Bocca Coffee: We assess the quality of our green coffee for defects and quakers to make sure the beans we roast are the finest. And our roaster's Q-grade is based on the official SCAs guidelines. With Specialty Coffee, it is very hard to keep a high level of consistency, but we believe it is very important that if you come in for a cup of coffee or we sell you a bag that it is consistent... Also, on the bar, we have a flow system that allows us to measure the yield of a cup so that we can guarantee consistency in terms of extraction.</p>
Abandonment of the Coffee Industry	C, D, F, I, J	<p>Customer Relations Manager at PRIMAVERA COFFEE: The problem is that the coffee industry is often not financially viable for coffee farmers... This means that sometimes coffee farmers abandon their farms and move to the US. Women are often left behind and do not feel empowered to produce the coffee under their own name or do not feel the agency to make</p>

		<p>business decisions. We try to incentivize these women by, for example, offering training programs or stimulating them to take more ownership.</p> <p>Co-Founder at Olisipo (1): We need to get the younger generation into coffee production and be honest that coffee is in crisis... And how do we make it sustainable for them financially?... We can do a lot more in the value chain to help support that effort and encourage them to stay in the coffee industry because otherwise, we do not have any coffee anymore to drink.</p>
Consistent Quality Control	B, C, D, E, F,	<p>Owner & CEO at Torra Roasting & Coffee: Whenever we buy new beans, we do cupping sessions in order to define the right roast and to check for consistent quality... We then do cuppings every single day to control the consistency of the roast and to create new flavor profiles for our customers... We frequently also open up cupping sessions to customers to teach them about Specialty Coffee.</p> <p>Co-Founder at Olisipo (2): During cupping sessions, we look at and taste the coffee to see if there are any defects and quakers. To accurately assess coffee quality during cupping sessions, we would need a very large group of experienced coffee professionals to cup each bean in order to guarantee an objective standard.</p>
Educating Consumers on Quality	A, B, C, D, E, F, J, K	<p>Owner & CEO at Torra Roasting & Coffee: One of the most important steps is to educate consumers. Brazil is the largest producer of high-quality coffee in the world, but even in Brazil, people lack the education to enjoy good Specialty Coffee. If people understand how to enjoy Specialty Coffee and learn more about what it takes to produce it, they would better understand why it is more expensive.</p> <p>Owner & Co-Founder at Combi Coffee Roasters: At Combi, customers never pay for what they didn't enjoy... If a certain coffee does not taste to their liking, I will offer them the same drink with exactly the same extraction technique but with different beans. When they then try it and they actually enjoy it, it opens the door for education as it helps them to understand the subtleties in the flavor of higher-quality coffees. I offer probably the cheapest espresso in the market of Specialty Coffee as this is what the Portuguese people drink, and my goal is to let them experience the coffee they have always had but from a higher quality by lowering the hurdle to start exploring it.</p>
Seasonality of Harvesting Cycles	B, C, D, E, F, I, J, K	<p>Industry Expert - Vivian Elion: If you look at Moyee and their value chains, the emphasis is more on education than transparency...because a farmer just wants to make enough money out of his 1.5 acres of land during the single harvesting cycle that he needs to live from for the entire year. Those are completely different problems... Compared to this, our climate problems are a luxury... That's why I think the focus areas and incentives for farmers should be completely different than with the roaster or a consumer.</p> <p>Industry Expert - Tanya Nanetti: Seasonality is a large problem in the coffee industry because we have gotten</p>

		<p>used to being able to drink coffee every single time of year. But how can this be sustainable if a year only has one harvesting cycle and the production is highly dependent on climate? The most sustainable thing would be to drink coffee only from certain origins that harvest in that same season.</p>
<p>Balancing of Quality and Sustainability</p>	<p>A, C, D, E, F, G, I, J, K</p>	<p>Co-Founder at Damn Good Coffee Company: People are upgrading their coffee set up in their offices as they got used to better coffee at home... But our main parameter is sustainability, so if we would source something where the sustainability parameters score super high, then we might go lower on quality... We want to democratize coffee, and we don't want to fall into the trap of being very specialty-oriented coffee retailers because you will only be able to serve this one coffee shop or this one company that makes your impact not scalable.</p> <p>Industry Expert - Tanya Nanetti: Sustainability is becoming a more present request by consumers... This should include not only environmental sustainability but also the working conditions of people along the value chain. We often speak about farmers not receiving a fair share of the value but also baristas often do not earn enough to be incentivized to continue their profession... An interesting development I see is that of specialty Robusta coffee, which can be more sustainable and easier to grow because it is less sensitive to an unstable climate.</p>
<p>Investing at Origin</p>	<p>A, B, E, F, G, I, K</p>	<p>Owner & Co-Founder at Combi Coffee Roasters: I wish that by buying more, more value would go directly to the country of origin and the farmers... To help them have a higher quality of life: build better houses, help them get access to education, and make sure the premium I pay really counts for a community. The big corporations purchase entire farms, but what they forget is that they need to invest in the development of communities to incentivize them to keep going.</p> <p>Building Inclusive Business Models at Fairchain Foundation: We invest in the farmers Moyee uses by providing them with training programs to increase the quality of coffee so that they can receive a higher price for their product. This again results in a higher overall income for these farmers... That's why we aim to serve the premium segment of the market.</p>
<p>Respect for Historical Precedent</p>	<p>B, C, F, G, I, K</p>	<p>Industry Expert - Vivian Elion: We as consumers need to realize that coffee is not a product that belongs to us. I find it very frustrating to hear consumers speak about the local roaster around the corner because coffee is not a local product, so you are misleading those consumers... Coffee is a product from the farmers so let's also try to be more modest and respectful of its origins in terms of the consumption of coffee... The authenticity of the bean should lay in the country of origin, and it is the responsibility of the retailer to bring this point across to the consumers.</p> <p>Community & Sustainability Coordinator at Bocca Coffee: Coffee production in Ethiopia, for instance, is such an important source of income that it also has a spiritual and symbolic significance; it is more than just a product but a means of livelihood. These products and their scarcity or price level have a huge impact on society... so it is important to look at the product as more than just a coffee bean.</p>

From Value Chain to Value Network	A, B, C, F, G, I, K	<p>Co-Founder at Olisipo (1): One of the prevailing injustices of the global coffee value chain is that the majority of producers do not get to taste their own coffee... The more power, knowledge, and education are concentrated in the hand of the producer, and with access to information, the better we can empower the producer. By for example having sample roasting and QC labs at origins,...in order for them to taste their own coffee. I'd like to see the coffee value chain as something that is non-linear...and to have the producer in the middle of it because that's where most of the value is being created.</p> <p>Knowledge Development Manager at the Specialty Coffee Association: Providing and bringing opportunities to more people... Especially in producing countries, there is a really strong interest in stimulating domestic consumption... But to bolster domestic consumption, we need to help and make sure that knowledge and education exist.</p>
Equitable Relationship	A, B, C, D, F, G, I, J, K	<p>Knowledge Development Manager at the Specialty Coffee Association: The conversation about quality and price is more than just what the farmers are receiving and the price that we pay. The whole concept of equitable value distribution...is about giving producers of coffee a better seat at the table... If we had more input from producers and they had a seat at the table on boards of corporations... There are so many more things we can do to justify giving people more value.</p> <p>Industry Expert - Tanya Nanetti: We need to start a dialogue between farmers and roasters in order to learn from each other... The best coffee I ever had was in Bali, and it was not scored on any of the famous quality scales, which means they needed to rely on the good faith of their business partners... We need to empower such producers and make sure that they don't sell a product for 1 euro if they should actually be selling it for 10.</p>
Educating Consumers on Sustainability	A, B, C, D, E, G, I, K	<p>Community & Sustainability Coordinator at Bocca Coffee: A lot of the wealth that is being created is going to go into recuperating some of the social and environmental costs that come with production and trying to translate why you pay a higher price for Specialty Coffee. We need to get consumers to understand the complex steps that go into production processes... We try to engage less in the discussion of price competition and classical market setups...by being a front-runner in changing the market and trying to educate consumers about what is the importance of drinking Specialty Coffee...because, in the end, a lot of sustainability involves consumption choices and if we better educate consumers about their own impact and carbon footprint, there would be much more interest in sustainability in coffee.</p> <p>Industry Expert - Vivian Elion: Transparency is a beautiful word, but it doesn't really mean anything... I believe it is more about being transparent with regards to your decision-making process than just sharing data and calling it transparency because consumers still can't do anything with this data... It is, therefore, more important to explain to</p>

		<p>consumers the risks, trade-offs, and consequences of the decision your company makes...and to offer transparency on the consequences of these choices.</p>
<p>The Fourth Wave: From Quality Awareness to Sustainability Awareness</p>	<p>A, B, C, E, J, K</p>	<p>Co-Founder at Damn Good Coffee Company: I believe sustainability is going to be the next wave and is going to move the sector into a new era... We are already seeing this in the demand as it is becoming a reason for people to prefer our products... But when we were in Milan for one of the biggest events in the coffee industry, my idea was that everyone would be shouting about sustainability this year. But actually, no one did. It was not on their radar at all... We are pushing this so much in Northern Europe, and it is definitely coming...but for producers and importing companies, it is simply not a focus area yet.</p> <p>Community & Sustainability Coordinator at Bocca Coffee: Hopefully, more emphasis will continue to be placed on sustainability, transparency, and visibility in the market. This is something that is happening now and will be the future wave of coffee, focussing on sustainability and transparency.</p>
<p>Overarching Sustainability Certification</p>	<p>A, C, F, J,</p>	<p>Co-Founder at Damn Good Coffee Company: We haven't found one really strong certification in terms of environmental sustainability. One of the most famous certifications is Fairtrade which was founded to tackle economic and social sustainability. This is also important, but it doesn't take CO2 emissions or environmental sustainability in general into account. In terms of environmental sustainability, just having an organic bean doesn't solve it; this only solves the issues with fertilization... My hope is that some of the bigger certifications are going to make some changes... What we need as the commercial actors of the sector is something that is certified because now we know that the farms are doing the right things, but we do not have any certification for it. Having one overarching certification could go a long way.</p> <p>Customer Relations Manager at PRIMAVERA COFFEE: The education of customers is extremely important when trying to explain why a certain coffee is more expensive than another one. But how much time do you really have as a roaster to communicate this to your customers? That's why labels like Fairtrade are still a thing, even though it actually doesn't really say anything... Ethically consuming is difficult, and it costs a lot of time to do, which makes it very difficult for consumers.</p>
<p>Collective Action</p>	<p>B, C, D, E, G, H, I, J, K</p>	<p>Owner & CEO at Torra Roasting & Coffee: We have very close relationships with our competitors. We are very small fish in an ocean of sharks. The market for Specialty Coffee is large enough for everyone and is constantly growing. We need to be united against the lower quality and unsustainably produced coffee.</p> <p>Director Sustainable Coffee at Conservation International: Personally, I am skeptical about the role of the consumer. I believe a consumer follows the transition and doesn't lead it. Eventually, the responsibility lies with the companies: Douwe Egberts, Starbucks, Bocca, and Moyee, who are responsible for bringing the coffee to the market. They carry the responsibility. That being said, I already see a clear increase in the number of companies</p>

		launching different initiatives, certifications, and projects.
Access to Sustainability Certifications	A, B, C, D, F, H, I, K	<p>Director Sustainable Coffee at Conservation International: In general, the role of certifications is crucial, but their application also has its limitations... For example, look at a topic like deforestation - a farmer or a corporation could be certified and therefore is not allowed to cut trees. Great!... But you need to realize that such a code is implemented in an environment of extreme poverty where, on a daily basis, they feel the pressure to put food on the table for their family. If they can instead cut down trees in order to sell wood... Those are the deeper layers - or root causes - of why a certain issue exists... It is naive to think that just by implementing a standard that those problems will disappear, but it does offer an infrastructure and control mechanism.</p> <p>Co-Founder at Damn Good Coffee Company: Given we focus on the Specialty Coffee sector, we have focussed on direct-trade, but it often involves fairly small farms that do not have the resources to apply for sustainability certifications. Sometimes there are farms that belong to the same cooperative and literally have fields belonging to the same piece of land, where one is fairtrade and organic certified and the other one isn't... The farmer that is certified receives a premium of which a large part goes directly to the certifications.</p>
Transparent Pricing	C, D, E, F, G, I, K	<p>Customer Relations Manager at PRIMAVERA COFFEE: We are extremely transparent with regards to the breakdown of our kilo price for coffee, which we can do because we have a high degree of vertical integration... To find a better alternative to the C-market price as a baseline for valuation, there are initiatives such as the Specialty Coffee Transaction Guide to which we, and many other coffee importers, provide information to transparently map out what the expected premiums are per origin and type of coffee and how much there is needed to cover the cost of living in a specific region. Because in the end, the goal of the coffee farmer is to be able to make a living and that he receives enough for the quality he produces.</p> <p>Building Inclusive Business Models at Fairchain Foundation: Coffee is an interesting product when mapping out the value distribution because the product is very linear. Specialty Coffee comes from one piece of land or region, is collected and processed into an end-product, then it is transported, packaged, and sold to customers. This makes it quite a simple value chain to map out and follow.</p>
Sustainable Aggregators	C, F, J	<p>Customer Relations Manager at PRIMAVERA COFFEE: People are often idealizing direct-trade and believe the middle-man is bad, but if clients work with us, they also often call it direct-trade because we are located in Guatemala... People do not realize the value we deliver and the risks we take. These are often risks that roasters cannot or do not want to take, which is why we are fulfilling a really important role in the value chain.</p> <p>Industry Expert - Tanya Nanetti: The fair distribution of value is a huge problem in the coffee industry. Direct-trade is one way to address this, but for direct-trade you need to have financial resources... Companies like Typica try to be a window between</p>

		roasters and traders...to help them set up direct-trade relationships with farms across the world.
Crop Diversification	B, C, F, I, K	<p>Industry Expert - Vivian Elion: Everything indicates that coffee farmers are totally not resilient against the consequences of climate change. Also, because they focus on a single crop, diversification of crops seems like a logical answer to this problem, but that would mean that a coffee retailer would become a completely different type of organization that does sell not only coffee but also a couple of other crops... There is going to be a lot of change, but the question is how they are going to adapt and how, for example, a retailer can support them in becoming resilient.</p> <p>Co-Founder at Olisipo (1): Because coffee has such a complex value chain...it opens the door to genetics, agronomy, and how we can achieve more bio-diverse farming systems and shift away from mono-farming systems and the reliance on pesticides and fertilizers.</p>

c. **Data Analysis - Analyzed Case Studies**

- f. **Damn Good Coffee Company (2018)** is a Copenhagen-based Specialty Coffee retailer that primarily sells to offices and coworking spaces and offers different coffee beans, as well as the machines and servicing of the machines. Damn Good Coffee Company emphasizes sustainability practices of Specialty Coffee along the entire value chain. The company differentiates itself through a strong track record of sustainability-oriented projects such as zero-waste packaging, CO2-free delivery, and innovative waste-to-value projects such as the recycling of coffee grounds. Up until today, they have managed to reduce their carbon footprint by 20%. Due to their focus on sustainability as their most vital differentiator, their zero-waste packaging system is also being sold as a separate product to other coffee retailers.
- g. **Bocca Coffee (2001)** is a well-established Specialty Coffee roastery and retailer in the Netherlands that serves both B2B and B2C clientele. Bocca is B-Corp certified (Benefit Corporation) and has the impressive claim of being the first Specialty Coffee company in the Netherlands to "...facilitate the entire crop to cup process" (Green, 2022). Through the trading entity Trabocca, Bocca does not only act as a roaster and retailer but also as a green bean trading company that closely interacts with farmers across the world.
- h. **Olisipo (2018)**, based in Lisbon, is a roastery that serves many Specialty Coffee retailers in Portugal. One of the founders, Antony Watson, is a highly experienced roaster and writer and worked as a consultant at the ZHAW Zurich University of Applied Sciences to support the development of the Coffee Excellence program. Watson and his co-founder, Sofia Gonçalves, offer a large variety of single-origin Specialty Coffees from all over the world by working with different green bean traders such as PRIMAVERA, who also agreed to be interviewed.
- i. **Torra Roasting & Coffee (2018)** is a Lisbon-based coffee roastery and retailer that, just like Bocca Coffee, controls the entire value chain of their Specialty Coffee, which is mainly sourced directly from farms in Brazil, mainly from the Caparaó region. Torra

Roasting & Coffee is serving both B2B and B2C customers and focuses its efforts on the traceability of its offerings and the education of customers.

- j. **Combi Coffee Roasters (2014)** is based in Porto and started offering its products directly to consumers through a "Specialty Coffee van" that became a literal marketing vehicle and helped them quickly establish Combi Coffee Roasters as the center of Specialty Coffee in Porto. The two brothers, Gonalo and Francisco Cardoso, now own two shops and a roasting factory. Their approach is to make Specialty Coffee as accessible as possible by offering the espresso almost at a cost price in order to try to educate consumers and bring Specialty Coffee to the masses.
- k. **PRIMAVERA (2013)** was previously known as Third Wave Coffee Source Ltd. and was founded by Nadine Rasch. PRIMAVERA is a coffee importer and green bean trader who focuses primarily on Guatemala coffees. Their sister organization, La Central de Caf , cooperates directly with the producers to source the green beans that PRIMAVERA brings to the market. They work with around 200 producers and serve over 200 roasteries worldwide (e.g. Olisipo). PRIMAVERA stands for transparent and long-term partnerships with farmers. They accomplish this by heavily investing in the farmer's operations and providing them with complete transparency on the price structure of the coffee they source. PRIMAVERA believes paying for quality is crucial to guarantee the viability of coffee farmers and the communities that depend on them.
- l. **Fairchain Foundation (2012)** aims to rethink economics and the redistribution of wealth along the value chain. In order to do that, they work, for example, with Moyee Coffee. This Specialty Coffee retailer is a certified B-Corp and believes in providing radical transparency and roasts its coffee beans in the country of origin to re-distribute wealth and value creation according to a "50/50" partnership. They believe that at least 50% of the value creation needs to benefit the country and community from where the product was sourced. Fairchain helped to develop a blockchain solution to provide complete transparency on all value-adding activities in the value chain. Fairchain functions both as a foundation, raising awareness and sharing best practices of the redistribution of wealth

and the use of inclusive business models, as well as a consulting service that helps implement technology solutions that bring radical transparency into the value chains of end-products such as flower, rice, chocolate, and coffee.

m. Conservation International (1987) is one of the largest non-profits focussing on climate, sustainable land- and seascapes, and ocean conservation, through cutting-edge innovation in science and finance. Together with large multinational organizations in the coffee sector, such as Starbucks, Conservation International develops strategies, projects, and programs in the field of sustainability. Starbucks has been working with Conservation International for more than 20 years. The organization has more than 800 employees across over 30 global offices and has partnerships with over 2.000 organizations worldwide. Given its long history and impressive track record, Conservation International is a connector between governments, financial institutions, companies, consumers, and other non-profits such as the Specialty Coffee Association. Conservation International is a crucial actor in multiple collective initiatives focused on sustainability, such as the Global Coffee Platform, the International Coffee Organization, and the Sustainable Coffee Challenge. The Global Coffee Challenge is currently the largest multi-stakeholder sustainability initiative in the coffee industry with over 160 partners, including traders, roasters, retailers, the most critical sustainability certification, and NGOs. Conservation International managed to protect over 6 million square kilometers of land and sea across more than 60 countries through collective initiatives like the ones above.

n. Specialty Coffee Association (1982 - SCAA) is a trade organization, and global leader in the field of Specialty Coffee intended to support global coffee communities to become "a more sustainable, equitable, and thriving activity for the whole value chain" (SCA, 2019). The SCA grew to become one of the most influential organizations in the industry, especially after the merger of the Specialty Coffee Association Europe (SCAE) and the Specialty Coffee Association of America (SCAA). The organization accomplished this through, for example, standardizing the quality evaluation process for Specialty Coffee and setting standards for sustainable and equitable coffee value chains. With approximately 8.500 members and by cooperating with organizations like Conservation

International, the SCA actively focuses on all members of the value chain and actively tries to push the industry forward and respond to industry needs.

- o. Tanya Nanetti** is an industry expert in the field of Specialty Coffee as well as Head Barista and Trainer at **Buna Specialty Coffee** in Lisbon. She has over 15 years of industry experience, working for prestigious Specialty Coffee retailers such as The Barn in Berlin. Moreover, she is a content creator and works as a consultant specializing in Specialty Coffee retailers.
- p. Vivian Elion** is an industry expert and currently works as Impact Investment Project Manager at FreedomLab, a think-tank for future scenarios that helps to create investment philosophies for large corporations that stimulate positive systemic transitions in society. Beforehand, she worked as Impact Officer for Moyee Coffee, where she was, for instance, responsible for designing a circular coffee chain that benefited farmers in the countries of origin, the management of the B-Corp certification, and creating the impact reports.

d. Data Analysis - Secondary Data Collection

Secondary Data Collection

Title	Format	Case / Role	Date	Data Type
Interview Menno Simons by Tess to Sustainability	Interview	Bocca, Co-Founder	20/04/2021	Secondary Data
Conservation International	Annual Report 2020	Conservation International	2020	Secondary Data
Starbucks Traceability Report	Corporate Engagement	Conservation International	-	Secondary Data
Protect Nature for Climate	Reporting of Projects	Conservation International	2022	Secondary Data
Sustainable Lands and Waters	Reporting of Projects	Conservation International	2022	Secondary Data
Governance and Sustainable Development: a case study of the Dutch coffee sector in a multi-stakeholder context	Academic Paper	University of Twente, Niels Haak	2013	Secondary Data
Carbon Insetting	Blog Article	Bocca	2022	Secondary Data
How much does your cup of coffee cost?	Blog Article	Bocca & True Price	2022	Secondary Data
What is happening to coffee prices?	Blog Article	Bocca	2022	Secondary Data
How much do things really cost? True Price	News Article	The New Yorker, Nick Romeo	2022	Secondary Data
Resisting the green gold	Blog Article	Vivian Elion, FreedomLab	22/02/2022	Secondary Data
Waste Doubles the income of Farmers	Blog Article	Fairchain Foundation	11/11/2020	Secondary Data
Digitization: Empowering Farmers Through Use Of Technology	Whitepaper	Fairchain Foundation, Guido van Staveren, Founder	-	Secondary Data
FairChain's new insights on closing the income gap for small farmers	Blog Article	Fairchain Foundation	12/03/2019	Secondary Data

FairChain Roasting Report	Whitepaper	Fairchain Foundation	2018	Secondary Data
FairChain Farming Report	Whitepaper	Fairchain Foundation	2018	Secondary Data
FairChain Impact Report (2018)	Impact Report	PRIMAVERA COFFEE	2018	Secondary Data
Video Voyage through Guatemalan Coffee	Video	PRIMAVERA COFFEE	-	Secondary Data
2021 SUSTAINABILITY REPORT PRIMAVERA	Report	PRIMAVERA COFFEE	2021	Secondary Data

e. Data Analysis - Omitted Code

Data Analysis - Omitted Codes

Omitted Codes	Reason for Omission
Innovative Packaging Solutions	Packaging solutions that are either recyclable or reduce waste consumption can prove to be extremely interesting for further research. However, it does not directly influence the quality valuation itself. Even though it influences the conservation of product quality, this is believed to have a limited effect on value distribution along the value chain.
Recycling of Coffee Grounds	Recycling coffee grounds could potentially prove to be an interesting future source of welfare creation as new innovative processes can transform this waste product into a new source of value (e.g. fertilizers). Nevertheless, currently, the value creation of such projects is limited, which is why it was excluded from the analysis.
Cost Global Transportation	Specialty Coffee is a product that is primarily consumed in countries where production is impossible or limited. It is therefore highly dependent on global transportation. In order to specifically investigate the retailers and the power concentration in consuming countries, this research chose to omit this emerging theme.
CDDC: Instability, Violence, and Corruption	Despite the indirect effect of social crises on the efficiency of the Specialty Coffee value chain, these crises are highly dependent on the specific country of origin. It could prove relevant to further investigate Specialty Coffee valuation processes on a per country-basis. Nevertheless, it was omitted as an emerging theme due to the lack of comparability and the difficulty of defining clear industry-wide trends.
Premium Robusta Coffee	Premium Robusta coffee is a more sustainable type of coffee bean as its plants are less affected by extreme temperature fluctuations. Nevertheless, as previous research has proven an increased demand for higher-quality coffee, this research decided to focus specifically on Specialty Coffee, which is defined as an Arabica coffee that scores at least 80 points on the SCA's standardized quality scale.
Roasting at Origin or in Consuming Markets	Roasting at origin was opted for by companies such as Moyee Coffee (partner of Fairchain) in order to perform more value-adding activities in the country of origin and therefore maintain a fairer value distribution along the value chain. Other Specialty Coffee retailers opt for roasting in the country of consumption, which keeps the beans fresh and maintains a high-quality standard. Even though many organizations mentioned the goal of placing the farmer more at the center of value creation, roasting at origin had not been adopted by enough organizations to analyze and compare the quality perception of these two different approaches, which is why this theme was omitted in the study.
Inequitable Partnerships in Consuming Countries	Many cases mentioned the unfair welfare distribution or the lack of equitable partnership when comparing the powerful coffee-consuming countries and the coffee-producing countries. One case mentioned that even in coffee-consuming markets, there are inequitable relations along the value chain, as certain specialists such as baristas often struggle to make a living. Even though this is a troubling finding, it has a limited direct influence on the product valuation and was therefore omitted.
Discrimination in the Industry	Tradition and culture largely influence how coffee is consumed. It was, for example, illustrated during the data collection that the coffee industry is often very much

	<p>dominated by men, which sometimes leads to women not being able to benefit from the growing market of Specialty Coffee. Despite the fact that this could prove an interesting topic for further research, it does not directly affect product quality and product valuation, which is why it was omitted for this research.</p>
<p>Colonization led to Coffee Consumption.</p>	<p>Multiple cases mentioned the historical significance of colonization in shaping the coffee industry. Even though this largely explains how the coffee industry evolved, this emerging theme was omitted as the Specialty Coffee industry actively fights this doctrine by working closely and equitably with farmers in producing countries. The effects of colonization on the commodity coffee trade would be an exciting field of research.</p>

f. Data Collection - Interview Questions & Themes

Subject to Customization dependent on the case

Company Information

- How would you describe the company you work for and your role within the organization?
- How would you describe the market you are active in, and whom do you consider to be your main competitors, and why?
- What makes you competitive compared to comparable companies in the market?
- How would you define the term Specialty Coffee?

Market Trends

- What trends do you see with regard to Specialty Coffee consumption?
- What do you consider the biggest threats to the consumption of Specialty Coffee?
- What trends do you see with regard to Specialty Coffee production?
- What do you consider the biggest threats to the production of Specialty Coffee?

Supply Chain Management

- How would you describe your supply chain? Which part(s) of the supply chain does the organization own?
- How do you work together with other actors in your supply chain? What are the main challenges you face?
- What do you do to control the activities in the supply chain that other actors own?
- If you had unlimited resources, what would you do to improve the Specialty Coffee industry/value chain as a whole?

Product Quality & Pricing

- How do you control and maintain the product quality of the Specialty Coffee you sell?
- How do you evaluate the quality of the Specialty Coffee you are purchasing?
- How do you manage the product quality of the Specialty Coffee you sell?
- How do you justify the price point you are currently adopting?

g. Example of Certification Price Premiums

Official Fairtrade Pricing Table (Fairtrade, 2021)

	Product ↓↑	Quality ↓↑	Form ↓↑	Country / Region ↓↑	Producer Scope ↓↑	Price level (INCOTERMS) ↓↑	Quantity / Unit ↓↑	Currency ↓↑	Fairtrade minimum price ↓↑	Fairtrade premium ↓↑	Date of validity ↓↑
+	Coffee	Conventional	Arabica;Natural	Worldwide	SPO	FOB	1 pound	USD	1.35	0.2	4/1/2011
+	Coffee	Conventional	Arabica;Washed	Worldwide	SPO	FOB	1 pound	USD	1.4	0.2	4/1/2011
+	Coffee	Conventional	Robusta;Natural	Worldwide	SPO	FOB	1 pound	USD	1.01	0.2	4/1/2011
+	Coffee	Conventional	Robusta;Washed	Worldwide	SPO	FOB	1 pound	USD	1.05	0.2	4/1/2011
+	Coffee	Organic	Arabica;Natural	Worldwide	SPO	FOB	1 pound	USD	Organic differential: +0.30	0.2	4/1/2011
+	Coffee	Organic	Arabica;Washed	Worldwide	SPO	FOB	1 pound	USD	Organic differential: +0.30	0.2	4/1/2011
+	Coffee	Organic	Robusta;Natural	Worldwide	SPO	FOB	1 pound	USD	Organic differential: +0.30	0.2	4/1/2011
+	Coffee	Organic	Robusta;Washed	Worldwide	SPO	FOB	1 pound	USD	Organic differential: +0.30	0.2	4/1/2011

Average Premiums Paid for Three Sustainability Certifications

Sustainable Coffee Survey (Giovannucci, 2001)

Premiums Paid for Sustainable Coffees			
	Organic	Fair Trade	Shade
Retailers	\$.64	\$.65	\$.60
Roasters	.46	.51	.41
Wholesalers	.50	.58	.49
Distributors	.47	.48	.44
Importers	.36	.74	.35
Industry average	.59	.62	.53