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TRANSPARENCY OF DANISH COFFEE SELLERS

A study on the transparency levels of four influential coffee sellers on the Danish market

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ABSTRACT

Transparency in business is gaining more popularity as a strategic choice for companies for a number of reasons. The purpose of the study is to expand the knowledge on how transparent are the Danish coffee roasters and instant coffee manufacturers towards their consumers, as well as the reasoning behind this level of transparency. I take the perspective of a consumer and analyze three sources of information through which companies have a chance to be transparent: the packaging of the product, the official website of the company and other relevant reports. I look at four major players on the coffee market in Denmark: Merrild Kaffe, BKI foods, Peter Larsen Kaffe and The Coffee Collective. I identify three possible classifications for transparency that shed light on which aspects are better or worse covered by the roasters. I find that the companies are better at providing information about themselves, without much reference to the rest of the supply chain. The only exception to the case is the specialty coffee roster The Coffee Collective, which provides full disclosure on its' suppliers, the price payed to farmers and the Quality Bonus, which is a reliable indicator for coffee quality. Based on Sodhi et al. (2019) classification of types of transparency information, I find examples from the four companies, covering different supply chain areas: suppliers, environmental footprint, costs, workplace safety, provenance. I finish the paper with suggestions for other researchers that want to look at transparency in the coffee supply chains from different angles.

INTRODUCTION

Transparency in business is a strategical choice for companies to provide accessible, relevant, straightforward information to other actors in the supply chain, especially consumers. There is a growing trend for companies to be more transparent (Marshall et al. 2016), in the hope that this will benefit the numbers on the profit line, as well as the rest of the society. Customers are expecting to have more and more access to information, otherwise they can easily switch to a competitor. Governments also impose more regulations on transparency reporting, which forces companies to assess what information and how much they want to disclose.

Transparency is especially meaningful in industries that have complex supply chains and other problems that cannot be solved by a single actor in the supply chain alone. The coffee industry is known to have a complex governance and serious environmental and social problems. In this case, higher levels of transparency could have a meaningful, positive impact on the lives of the people that are part of this supply chain, as well as the environment's health.

Currently, the world consumes over 3 billion cups a day and the market continues its' growth at an annual rate of 2.2% (International Coffee Organization, 2019). Denmark is known for having one of the highest coffee consumption rates, with the average yearly consumption of 8.7 kg of coffee per person (CBI, 2020). Danes love their coffee, the beverage being part of the social and business setting all over the country.

Undoubtedly, coffee has a big impact on the lives of consumers – making them more productive and energized every day. But it has an even bigger impact on the lives of people that work towards bringing that cup of coffee to the table. Coffee represents the most important source of income for 25 million smallholders in 60 tropical countries (Pelupessy, 2007). It connects the Global South to the Global North, through a multitude of actors.

The supply chain of coffee is known to have market imbalances, even though there have been both private and public entities trying to solve the issues, with no success (Pelupessy, 2007). The prices payed to the farmers have dropped by 30% in the last two years (International Coffee Organization, 2019). 30% is a high percentage for the farmers that are struggling to cover their production costs. According to the International Coffee Organization (2019) the coffee-producing countries earn around 220 billion USD through exports, which account for a fair share of the countries' economies. The coffee sector as a whole has an annual income of over 220 billion USD, which is 11 times more than the value retained by the coffee producing countries (International

Coffee Organization, 2019). The numbers clearly indicate an imbalance. For anybody that knows about this situation, it can be frustrating to think of what this means for the producers.

On one hand, the market is expected to grow with the coffee demand increasing, due to population growth and increasing popularity of coffee in developing markets, such as China, India and Eastern Europe. On the other hand, lack of economic incentives, as well as environmental pressures makes it unattractive for farmers to continue coffee farming, which puts the industry in a danger zone.

Another issue is the commodification of coffee and the lack of appreciation of the uniqueness that comes with every coffee bean. Many coffee experts wish that coffee had a similar status to wine, where the land of origin, processing methods and brewing had a significant impact on the choice of consumers. Educating consumers on quality attributes of coffee would help decommoditize the coffee, allowing for positive change along the supply chain.

Transparency in the coffee supply chain would be the first step in alleviating lack of knowledge, market imbalances and environmental and social problems. It is not an easy task to do. It requires management motivation, cooperation between business partners, investments and consumers that reward the companies that make the effort of improving things. The long supply chain makes it hard to achieve traceability and transparency. Some coffee sellers are trying to change that by:

- Using technology, such as blockchain or other tracking methods;
- Shortening the supply chain and sourcing directly from the farmers;
- Finding better negotiation methods with the help of collectives of coffee farmers or certification agencies;
- Being transparent on business practices and future targets.

The purpose of this research is to explore the current situation on the Danish market for coffee, regarding transparency efforts of Danish companies or international companies that operate on the Danish market. The main purpose of the research is to identify the level of transparency and the motives that drive this level of transparency. Therefore, the main research question of the study is:

What is the level of transparency that Danish coffee sellers offer to their customers?

With the sub-question:

What is the reasoning behind having this level of transparency?

To be able to answer these questions, in the literature review I explore transparency alone and assess:

What is transparency? What are the risks and benefits that come with it?

Then I focus on the coffee industry and explore:

What are the problems is the coffee industry? Is there a need for transparency in the coffee supply chain?

The results of this study will contribute to the body of knowledge on the topic. I hope to inspire the readers of this paper to either expand research on the topic or call to action consumers, roasters or other actors that have the potential to make a positive change in the coffee industry.

LITERATURE REVIEW

Given the research questions of this study, in the following literature review I will start with looking at transparency. Namely, what is transparency, what types of information it can provide and the risks and benefits that come with being a transparent company. Traceability, which is a necessary capability of a company before becoming transparent will also be discussed.

Afterwards, I will discuss what is the purpose of transparency. This chapter is meaningful to the whole research, since if transparency is not valuable, then studying the transparency of coffee roasters in Denmark is not impactful research. Further on, I will discuss the conflicting views on ethical consumerisms and if being a transparent company actually makes an impact for the purchase behaviour of consumers.

Further on, I will analyze the supply chain of coffee. First, I will look at the supply chain stages through which the coffee bean goes through. I will talk about the quality categorization of coffee and how quality and transparency relate to one another. I will further discuss desirable qualities in coffee, given the fact that there are several social and environmental issues that these desirable qualities tackle (fx. organic coffee has a positive impact on the environment). Transparency initiatives of coffee roasters are expected to show off these desirable features as part of their marketing, so it is important to understand *what* and *why* are these attributes desirables.

Next, I will discuss the power dynamics and the value creation in the coffee supply chain. Understanding how the supply chain is built and distributed sheds light on why some problems, especially the one of farmer's low pay are ongoing problems. I will then talk about the specialty coffee and how that comes as a response to the many issues in the coffee supply chain, setting an example in terms of transparency and overall business practices.

I will end the literature review by looking into more detail at the location I am analyzing in this research, namely the coffee culture in Denmark.

The literature review is set up having a more general look on transparency and then taking the example of the coffee industry, to see if there is a need for more transparency.

1. TRANSPARENCY - DEFINITION, BENFITS AND RISKS

DEFINING TRANSPARENCY

More companies than ever before chose to provide information about their products and supply chains to consumers (Marshall et al. 2016). Besides complying with regulatory requirements, companies can choose to be transparent for a number of reasons. Research supports the hypothesis that a company can gain from being more transparent to both internal and external stakeholders, by disclosing information about practices, policies or even executive compensation (Buell, 2015). Other researchers suggest that the benefits of such disclosure are not researched enough and many companies do not understand the value of such disclosure (Sodhi et al. 2019). At first, efforts in being transparent can seem to be unnecessary, costly and even detrimental for the company's profits. At the same time, there are a number of reasons why companies, including the ones that are part of the coffee supply chain, would choose to be transparent. There are a lot of pro-transparency initiatives in the coffee industry, compared to other fast-moving commodities' industries. One look towards the shelves of the coffee selling retail stores in Denmark is enough to observe that companies seek to assure their customers about provenance and other qualities. Third-party certifications and display of land of origin are some of the typical transparency efforts. The reasons why coffee supply chains are in need for more transparency will be discussed in the next paragraphs.

Before proceeding further with the benefits and risks of transparent supply chains, a definition of transparent supply chains will be given. A company with a transparent supply chain is

"a company disclosing information to the public, including consumers and investors, about upstream operations and about the products it sells to consumers" (Sodhi et al. 2019).

The name of the product, the price, the weight, the company name, provenance, (and several others depending the product) are also information that provides transparency about the product. Food labelling is mandatory by law, especially when the product can harm a person if misused (Food Standards Agency, 2020). Transparency can be all information about the product in its current form, how it got there and where it might end up. Transparency is useful for tracing the origin of products, but also offer assurance of intra-chain quality in transactions between supply chain actors (Wognum et al., 2011).

To be able to be transparent, a company needs to be able to trace the origin and practices of its suppliers. Traceability is

"the capability of a company for ascertaining provenance" (Sodhi et al. 2019).

A company can choose to have traceability, for the sake of efficiency, safety, flexibility, but not disclose it publicly, keeping the information to itself for management purposes. A company can have traceability and no transparency, but cannot have transparency and no traceability, because there is simply no information to disclose in the latter case.

Traceability provides information internally in the company or in the supply chain for managers, immediate suppliers or immediate customers, while transparency provides information to a larger set of external stakeholders, such as consumers, consumer rights' advocacy groups, NGOs, investors, monitoring agencies (Sodhi et al., 2019). In this paper, I will focus on B2C transparency targeting the final consumers of coffee, but a few notes will be added about B2B transparency.

Transparency in the coffee supply chain can be about both upstream and downstream operations. Upstream operations refer to farmers, roasters, retailers and all actors in between, up to the consumer. Downstream operations are more common in the B2B companies, where they choose to disclose information about their customers (normally for marketing purposes) or waste management practices.

Sodhi et al. (2019) provide six types of *product and supply chain information* that can be disclosed to the consumer, besides the mandatory information, in the effort of being more transparent:

- 1. Supply chain (suppliers at all tires). Even though such full disclosure is not as wide spread, some companies such as Heidi.com S.A. use transparency as a differentiating mechanism. Especially in the apparel industry, where competition is high, the disclosure of the whole supply chain comes as a benefit in attracting customers. This form of disclosure is easier done when the supply chain is short, or when there is trustable technology put into place, such as blockchain. I would also argue that it is easier to be done by start-ups, then by big companies. The big corporations have a certain business culture already established and that culture can be hard to be changed, while a start-up can, from the beginning, decide whether transparency is something they choose or not to take into consideration in their business strategy.
- 2. Supplier base (Tier 1 suppliers only). This a more common practice, compared to the previous one, since it takes less effort and investment. It entails the disclosure of immediate suppliers, the ones that the company is in direct contact with. It is not as

- challenging to publish this information, since the company already has information on its suppliers.
- 3. Supply chain environmental footprint. This information discloses compliance with environmental regulations and other environmental targets for energy usage, water consumption, recycling, waste treatment, air pollution and others. Different industries are known to have issues in some specific environmental targets. Coffee is known for its' highwater usage, deforestation and soil degradation. It should be noted that it makes most sense to publish those environmental measures, where there is the biggest problem. For the coffee industry, measures that make most sense would be ones that show low CO2 consumption, proper water management, soil health, proportion of shade, bird-friendly grown coffee, proportion of organic coffee and other measures.
- 4. Supply chain cost information. This is about the costs incurred and possibly the mark-up received by the company. It is a more radical form of transparency, but a possible strategy for companies such as Everlane to differentiate itself from the competitors. In the coffee industry this could be a significant selling point, due to known problems with farmers' low payment.
- 5. Supplier workplace safety compliance. The disclosure is especially relevant in industries where it is known that workers might not work in a safe environment, such as the apparel industry. After the Rana Plaza collapse in Bangladesh in 2013, where 1134 workers died and many others were injured, the apparel industry experienced a shock, followed by the establishment of the Accord on Fire and Safety Building in Bangladesh and other initiatives with the purpose of improving worker conditions. Compliance with safety standards and displaying this information became the next step for companies. Even though not as serious or wide-spread as in the apparel industry, there are cases in the coffee industry of improper working conditions. A recent example would be a UTZ and C.A.F.E Practices certified coffee farm that was found to have miserable working conditions, with lack of sewage, fresh water and overall very poor labor conditions (Penha, 2018). Bats were found in the water that was used for cooking and cleaning and mice were often eating the farmers' food (Penha, 2018).

"This is not the first or second time, and it will not be the last time a certified farm is charged with employing slave labor and violating labor rights"

- -Jorge Ferreira dos Santos, head of the Coordination of Rural Employers of Minas Gerais (Penha, 2018).
- 6. Assuring provenance is about the materials used and produced, their source location and method of extraction/processing. This information is highly used in the coffee industry, due

to the fact that the origin and method of growing and processing the coffee beans highly influences the final quality – which is an important selling point for coffee.

Besides the proposed types of information Sodhi et al. (2019) also provide examples of *involuntary third-party disclosure* of a company's information, where some of the company's practices get to become visible to the public through another company, usually due to allegations of bad business practices. Apple was the target of such disclosures about the treatment of workers of its suppliers and about the supply chain cost of producing the iPhone. The negative publicity pushed Apple to become more transparent and publish its "Supplier responsibility progress report" (Gies, 2012).

BENEFITS AND RISKS OF TRANSPARENCY AND TRACEABILITY

As mentioned before, it is impossible to be transparent, when practices are not traceable. There are several benefits in having a traceable supply chain. When there is lack of information, the management has a harder time identifying where a problem comes from or how to solve it. On the other hand, information about products, flows, location etc. can be crucial for a company to be successful. A traceable supply chain has all actors along the supply chain willing to disclose important information. That is a big challenge, given the fact that some actors in the supply chain don't trust the others, or simply because there is a lack of effective communication between the supply chain nodes.

Sodhi et al. (2019) provide 3 main benefits of traceability:

- 1. Managing supply chain risk. In case of supply chain disruptions, such as supplier bankruptcies, supply shortages, product recalls, natural disasters or a virus outbreak, information on suppliers is crucial to be able to mitigate the risk. If a coffee roaster sources from one single farm and receives the information that the supplier will have a reduced crop this year or will go bankrupt, then the roaster can take some precautionary measures. If there is no such information, then the reduced supply of coffee beans will diminish the roaster's ability to be successful in its business.
- 2. Reducing reputational damages. By keeping track of suppliers, companies can better implement inspection mechanisms that ensure good business practices in their own company, as well as their suppliers'. Otherwise, there is the risk of involuntary public exposure of unacceptable supplier practices or undesirable provenance. In case of the previous mentioned case at Fartura farm in Brazil, the management was said to have taken the news "with shock" since "slave labor is not the company's work philosophy"

- (Penha, 2018). It could've been that the management actually knew about the workers' conditions and chose not to do anything about it, but in the case that they were truthful in their statements then the situation could have been omitted if the management kept a closer eye within their own farms. This example shows how visibility can be hard to be achieved even within the company, let alone further into the supply chain.
- 3. Improving supply chain efficiency. Visibility in the supply chain allows for better decision-making and possible better configurations of supply chains. An example would be GE re-shoring its water heater production back to the US after realizing the benefits of being close to its customers. In the coffee industry, shortening the supply chains is a way to improve efficiency. Direct trade is the best way to shorten the supply chain. Besides the many other benefits, direct trade (or shortening the supply chain) can improve efficiency, since the coffee roaster (the closest link to the end customer) can have better product flows with the farmers (the furthest link from the end customer) and can agree on investments that will benefit their efficiency and profitability in the longer run.

BENEFITS OF TRANSPARENCY

Normally, companies are reluctant to disclose the information they have on their supply chain, because that can retain valuable information that could be used by their competitors. The fear that they can lose their competitive advantage is what stops many companies to proceed forward with being transparent. There are some disadvantages that come with transparency, as well as some worthy to be considered benefits.

Sodhi et al. (2018) provide 3 main benefits of supply chain transparency:

1. Gaining consumers' and investors' trust. "Playing with open cards" makes a company more trustable. It shows the consumer that the company doesn't have bad business practices to hide, at least in a specific area. Investors also seek companies that are and look trustworthy in the eyes of customers – that indicating potential for sales growth. A worth mentioning point noted by Sodhi et al. (2018) is the importance of online reviews in purchasing decisions, as well as importance of online transparency of the company. Wide-spread access to internet, makes it possible for consumers to interact with each other and hold the companies more accountable. Since information online circulates fast, it is in the company's interest to publish the (sometime negative) information first, before it gets out of hand juggled by angry customers.

In the coffee industry, trust of consumers can be a pool of potential growth. Especially ethical consumers know that there are some prominent problems, such as farmers' inadequate pay. If transparent about payment of farmers or other issues customers are interested in, the company can gain a positive brand name and leverage that for its success.

- 2. Meeting regulatory compliance and preventing bad publicity. If a government has certain laws requiring information about the quality of the product, its provenance, its processing, then the company is pushed to be more transparent by law.
 Most governments do not have any requirements for coffee transparency, besides the typical labelling requirements to be published on the package. Besides abiding the law, companies need to maintain good relationships with NGOs or other similar companies. Even though no company is legally forced to abide by NGOs' environmental or social norms, failure to do so can cause them bad publicity.
- 3. Monitoring suppliers through "Crowdsourcing". Transparency in regards to suppliers (name, location, operations) can decrease the costs associated with audits, given the fact that the public (NGOs or consumers) can now monitor these suppliers' activities. If a supplier is found guilty of bad business practices, the focal company might not suffer from the bad reputation as it would have if it didn't expose the supplier information in the first place. On the contrary, the focal company could even be praised for the fact that it was transparent and published information that was later used to identify problematic business practices in other companies.

Accompanied by these benefits, transparency comes with its drawbacks. Compiled by Sodhi et al. (2019) the main drawbacks are:

- Difficulty and cost of gathering information. A company first needs to have traceability before transparency and that itself can be a huge cost. A challenge for many companies is that they have no or limited information beyond their immediate suppliers (Nimbalker et al., 2013). In some industries, including the coffee one, the number of suppliers beyond first tier can be overwhelmingly big, with suppliers from all over the world, where communication barriers can also stand in the way. Suppliers might be reluctant to share information when they are not pushed by law and it is not their immediate business partner asking them to share information. Moreover, there is no guarantee of the quality of information provided, unless trustable technology is used (e.g. blockchain).
- Potential risks for disclosing supply chain information. A company can lose its' competitive advantage when disclosing its business partners. Other competitors can get access to

potential valuable information, such as where the company is sourcing its' materials or services, if there is a special location/supplier that is responsible for a higher quality. Other risks include guilt by association (if a supplier has bad business practices, the reputation can spill over the focal company), guilt by omission (if the disclosure is not full, the public can start doubting that the company is hiding something) and loss of deniability (if a supplier is accused of bad business practices, the focal company will not have the possibility to deny business with that supplier, even though denying something true is unethical).

- Negative consumer response. Sometimes disclosing certain information can be misaligned
 with the image the brand is portraying. For example, all-American or all-European brand
 images can deteriorate when another provenance is displayed. In the coffee industry, it is
 known that the coffee beans will almost always come from a country in the Global South
 and the origin is usually displayed with pride and as a differentiating mechanism.
- Negative governance and investor response. Reporting information on the supply chain to
 investors could be a worrisome activity for some managers due to pressure to look good.
 Some could choose to provide only positive information. Not disclosing important
 information, especially if it is the negative kind, could make the company legally
 accountable to its investors.

It is up to every company to decide how transparent it wants to be. It is a strategic choice on what aspects of its business will the company disclose information. It can choose to be more focused on its' internal processes, its' ethical/sustainable procurement, its' social or environmental targets and achievements or anything else that speaks about either the final product, the company itself or its' supply chain.

2. PURPOSE OF TRANSPARENCY AND ETHICAL CONSUMERISM

PURPOSE OF TRANSPARENCY

A focus on sustainability is necessary in all industries if we want to maintain an environment in which our children and all children after them can live (Datschefski, 2001). Currently humanity uses more resources that the Earth can sustainably provide. The overshoot day in 2019 - the day in which we have used more resources than the Earth can renew during the whole year - was 1st of August (Earth Overshoot Day, 2020). We would need 1,75 Earths to maintain our current

consumption and not undermine future generations' ability to provide for themselves (Earth Overshoot Day, 2020). Based on the framework developed by Rockström and his colleagues (2009), called the Planetary Boundaries, we have already surpassed the safe limits of 3 of the 9 boundaries in climate change, the global nitrogen cycle and rate of biodiversity loss. That puts humanity in somewhat a danger zone, which worries many consumers.

Besides environmental issues, there are many other social issues, which are partly caused from irresponsible business practices. The United Nations – the largest and most powerful intergovernmental organization - has several social goals that aim at improving the lives of people by tackling poverty, hunger, lack of health and well-being, education, gender equality and other issues (United Nations, 2019). UN highly encourages the business world to incorporate the UN sustainable goals as part of their business activities. Two years after their launch in 2015, the SDGs were used by 39% of N100 and 43% of the G250 companies in their reporting, that indicating a distinct trend that suggests that the SDGs will gain more importance in corporate responsibility reporting (KPMG, 2017).

Some social issues are very closely linked to environmental ones. For example, if communities of workers do not have access to education, then they are less likely to invest in sustainable practices. Coffee farmers that have better pay have the possibility to invest in better practices that preserve their soil, the quality of their water, their crop and, in the end, have higher profitability thanks to higher crop yields. Another example is if there is not enough water supply, then the coffee trees will not blossom to their full potential. Lack of water lowers the crop yield and negatively influences the farm's profitability, which perpetuates the inability to solve the water issue. The environmental and social issues are very often acting like a vicious circle, one worsening the other.

It is undoubtedly clear that humanity faces challenging problems. The purpose of transparency is to make the first step in solving the issues. When stakeholders of a company (customers, management, investors, employees etc.) are aware of certain information, they can make better decisions. If a coffee roaster finds out that one of his traders is violating human rights (or does anything else unethical), then he/she can switch to a better trader, or help the current trader improve their practices. If a consumer knows that coffee brand #1 is treating its' workers better or has more sustainable farming practices compared to #2, then he/she can choose to support the better brand #1 or nudge to action brand #2. In this way positive change is created through support of better supply chains and elimination or call to action of "worse" supply chains.

^{*}N100 refers to top 100 companies for each of the 49 researched countries. G250 are the top 250 companies largest by revenue, as ranked by Fortune 500.

Transparency is the most direct way for a company to communicate to its customers about its corporate social responsibility. Lack of transparency therefore could be an indicator of lack of commitment towards being a socially responsible company. The growing concerns on environmental and social issues have expanded the interest in CSR not only to philanthropic activists and ethical consumers, but also to the management of companies (Tang, 2008). As a result, companies want to ensure that they are a responsible company and that consumers see that too. CR (corporate responsibility) reporting has considerably grown in large and mid-cap companies, as suggested by the graph below (KPMG, 2017).

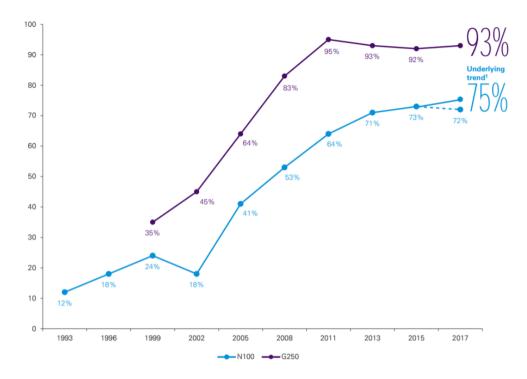


Figure 1 - CR reporting trends. Source: KPMG (2017)

Base: 4,900 N100 companies and 250 G250 companies
Source: KPMG Survey of Corporate Responsibility Reporting 2017

Among the G250 companies (the world's largest companies by revenue), 90% of them acknowledge human rights as a business issue and include that in their reporting and 67% disclose targets to limit their carbon emissions (KPMG, 2017). However, only a minority of businesses are aligned publicly to the UN Guiding Principles on Business & Human Rights and only a minority relate their carbon targets to the climate goals set by governments or the UN (KPMG, 2017).

It should be noted that transparency or CR reporting (which is a form of transparency) does not always imply positive change. It can be used for mere marketing purposes only. One can make the numbers look good on paper, without lying, but no meaningful impact is being made. One example would be companies proudly marketing their products as made out of 100% recyclable

materials. Most materials are already recyclable, but the real challenge is to actually get them recycled and use them again as input for new products. This example and many others can be found day to day when shopping. Such transparency can be an effective tool in attracting customers and sadly sometimes this is done just for marketing purposes and doesn't drive actual positive change. However, the company runs the risk for becoming the target of critical consumers or consumer advocacy groups that can point the finger towards it and damage its' reputation.

ETHICAL CONSUMERISM

The next intuitive question would be: do consumers really care about the transparency initiatives of a company? If so, does that translate into their purchasing behaviour? Carrington et al. (2014) argues that there is an intention-behavior gap in ethically minded consumers, meaning that the ethical concerns of consumers don't always translate into ethical purchase behaviors. The obstacles that lead to this gap are: "alternative personal values, extant plans, inability to form plans, unwillingness to make a commitment, lack of available information and unwillingness to conduct effortful searches for information and the distraction of situational environment" (Carrington et al., 2014, p. 2765).

One of the obstacles they identify is the *lack of available information*. Transparency comes as a solution to this issue, by providing information to the consumer. But then another obstacle is the *unwillingness to conduct effortful searches*. A lot of the transparency information comes in a format that takes effort on the consumers' side to be read. It can be on the company's website, in the companies' sustainability report or on other platforms such as ethicalconsumer.org. It takes considerably more effort and commitment to look into that, compared to a quick look on the packaging. Certifications come in "handy" to prove the buyer compliance with higher standards at a quick glance. Other quick – to - read syntaxes, such as "organic", "bird-friendly" or "direct trade" also act both as marketing and transparency information.

The dispute regarding the effect of ethical marketing on purchase behavior is a controversial one (Carrigan, 2001). There is a hopelessness of ethical consumerism in the business press, due to this intention-behaviour gap (Irwin, 2015). As confirmed by Carrington et al. (2014), there isn't a straightforward path between ethical values and ethical purchases. There are no clear numbers on how many of the consumers with good intentions translate that into buying behaviour. It is hard to come up with clear statistics, due to the response bias, halo-effect of self-reports and the hardship of organizing field experiments.

One way to look at the problem is looking at the market share of ethical companies vs. the other ones. As seen in the graph below, ethical spending and investment in the UK (and most probably in other European nations) has risen. But so did the awareness of consumers. If consumers were to act according to their reported beliefs that human rights are important in their shopping habits, then sales of ethical products, such as fairly-traded goods, would have a larger market share than it does now (Tallontire et al., 2001).

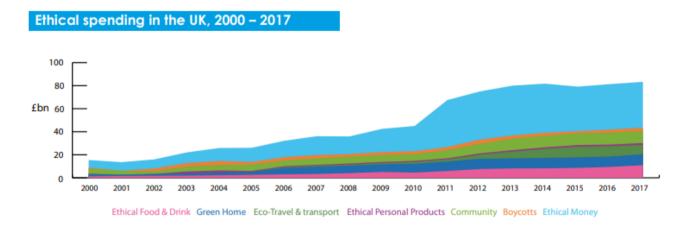


Figure 2: Ethical spending 2000-2007 UK, Source: ethicalconsumer.org

The ethical consumer intention-behaviour gap should be taken into account when talking about transparency. Some companies might not want to bother to be more transparent and incur all costs that come with it, due to the belief that the sales won't increase enough. There are arguments on both sides and even though this paper looks at transparency as something worth happening, it is also understandable that some companies are not ready to take this step yet.

Two strong pro-transparency arguments are:

- The ethical consumer intention-behavior gap is because of poor marketing. Irwin (2015) argues that current sales are not the best barometer for ethical sentiment and what is actually lacking is better marketing. Sometimes it is the phrasing that is missing.
 Consumers that are more aware of labor rights violations tend to respond better to negatively framed messages, while the less-aware consumers respond better to positively framed messages (Langland, 1998). In short, ethical companies that could benefit from being transparent should focus on better marketing.
- Sooner or later, regulation will be pushing transparency forward. In KPMG's Survey of Corporate Responsibility Reporting 2017, Jose Luis Blasco, head of sustainability services notes that "regulation emerged as a clear and recurrent theme" (KPMG, 2017, p.6) and

that voluntary guidelines are transitioning into mandatory reporting, as requested by local governments around the world. Voluntary transparency might become mandatory transparency, due to the mentioned social and environmental issues. It might come as a natural next step for a company to want to design their products and processes for environmental, social and economic sustainability and then be transparent with it. In the beginning transparency can be used as a customer attraction tool and, in the future, it might become compliance with regulation.

There is a large array of social and environmental issues in the coffee supply chain, making it one of the target industries where traceability and transparency can have a significant positive impact for everybody in the supply chain, starting with farmers and ending with the final consumers. There are already plenty of transparency initiatives that have the purpose of proving to customers environmental and social care, along with other practices that improve the quality of coffee.

3. Coffee supply chain

Processes in the coffee supply chain

To understand the supply chain of coffee and what are the transparency possibilities with it, one needs to understand the physical processes that are needed for coffee to reach its' final destination.

The coffee beans have a long journey to travel before they are consumed. Thanks to the connectivity of today's globalized world this journey is possible. That was not the case in the 15th century when coffee is assumed to have been consumed only in Yemen (Weinberg et al., 2001). It soon spread to Mecca, Cairo, the Middle East, India, northern Africa and then later Europe, Asia and America (Meyers, 2005). The spread of coffee came with controversy in many regions due to its' unusual quality of energizing people or its association with other cultures or religions. In certain times in history, coffee has been banned in Mecca, Italy, Constantinople, Sweden and Prussia (Blotnik, 2013). Nowadays, the only restrictions are regarding too much caffeine intake and the health hazards that come with that.

To get to consumers, the coffee bean goes through the following processes: growing, harvesting, hulling, drying and packing, bulking, blending and roasting (Severins, 2018). The processes are supported by a few intermediaries responsible for export, transport, retailing.

- Growing. Coffee beans are the seeds of the cherries growing on coffee trees. These trees need stable temperatures, around 25 degrees Celsius. The necessary climate for that are in the global south. Central and South America, South East Asia and some regions of Africa have the optimal climate for the trees to grow, therefore mass-scale planting of coffee happens in these locations. The long physical distance between growers and consumers is an impediment in effective communication (language barriers, cultural distance and the physical distance itself). Because of lack of effective communication, many of the problems in the coffee industry are worsened.
 - The tree needs 4 to 7 years for the tree to mature before it can produce its first crop (Severins, 2018). Investing in coffee trees 4-7 years in advance is a huge commitment, especially for the farms with limited resources.
- Harvesting, hulling and drying. The cherries are picked up by hand several times, since the
 cherries are not all ripe at once. After being picked up, the hull and dirt are removed and
 the beans are separated from the cherries. There are several methods to do so and that
 might impact the final quality. These processes are labour-intensive (Severins, 2018).
- Packing, bulking and blending. Once the beans are dried, they are packed into 60 kg sacks and then passed further on to exporters (Ponte, 2002). These exporters make sure to gather the necessary amount of beans to cover the big amounts of coffee required by the big coffee roasters/distributors. Professional roasters often blend different types of beans, to create their distinct brand aroma. Even if a supplier fails them and one type of bean does not reach them, they can still create the same aroma. The blending techniques' purposes are minimizing the dependence on one type of bean and production of homogeneous, mass-scale quantity of coffee (Daviron and Ponte 2005).
- Roasting. Roasting is an essential part of the coffee making and it highly influences the final
 quality. The high temperature causes a chemical reaction, which is what brings the roasted
 coffee flavor consumers seek. Depending on the timing and temperature used during
 roasting, there are light, medium, medium-dark and dark roasts that influence the
 bitterness and origin aromas (National Coffee Association of USA, n.d).

The processes that go into making coffee have a significant impact on the *quality* and taste of coffee, the *environmental footprint* and on the quality of life and work of the *people* involved. Traceability has a role of documenting the processes through which the beans have been through and transparency has a role of providing this information to the actors in the supply chain to base their decisions. As it will be described in more detail later, the power of decisions lies mostly in the consuming countries, in the hands of consumers and roasters.

QUALITY AND TRANSPARENCY

There are many caffea species, but the mass traded ones are Robusta and Arabica with approximately 40% and 60% respectively of the market share (Grand View Research, 2018). Both kinds of coffee are expected to grow in the next years, in terms of sales. Arabica has lower caffeine intake, a sweeter taste and is considered of higher quality, which partially explains its' popularity over Robusta. The growing number of cafes in developing countries, as well as usage of Arabica coffee beans in other products, such as chocolate is expected to facilitate further growth (Grand View Research, 2018). On the other hand, Robusta experienced a 7.4% market growth in 2018 (Grand View Research, 2018) thanks to consumers that desire a higher caffeine intake and the potential health benefits linked to Robusta. Compared to Arabica, Robusta can tolerate hotter and drier climates and is also more resistant to pests and disease. With increasing droughts and pests, Robusta is expected to be the favored coffee species (International Coffee Organization, 2014).

Depending on the quality of the processes that took the coffee bean from soil to the cup, there are four categories for classifying the quality of coffee, according to the International Trade Center (2011):

- 1. Exemplary quality. Coffees that are very unique in their taste and have limited availability. They are usually single-origin and sold in specialty shops.
- 2. *High quality and premium brands*. Coffees with minor defects, but still high quality and organic. They are sold as single-origin or blend in both specialty shops and supermarkets.
- 3. *Mainstream quality*. Coffees with some defects, but well processed. This category accounts for 80-90% of the global trade.
- 4. Undergrades and lowgrades. Coffee with lower criteria than the mainstream one.

It is highly convenient for companies that sell *exemplary or high quality* to want to be transparent. Transparency in this case acts as a great marketing tool. It is visible that the higher quality coffee brands give more information to consumers. They usually adhere to quality standards or working standards that are displayed on the packaging. They release reports about CSR or have more information on their website about how the great quality came to be as it is.

From a company's perspective, being transparent in selling *mainstream quality* can also have benefits. Firstly, it differentiates itself from the other brands. Even though their processes might be very similar to the other 80-90% on the market, the mere effort to be transparent can already be valuable for some customers. Something as simple as mapping the supply chain and presenting it on the package with a QR code can be an interesting feature. Secondly, in the effort of being transparent the company would have to first map out their supply chain. That would enable the company to possibly identify weak spots, such as poor working conditions for the farmers, that are not desirable to be presented to the consumers. That could lead to the company trying to either improve the supply chain, by imposing certain standards or changing to already existing better suppliers. On the other hand, certain information presented to the public can backlash, if somebody blames the company for not doing enough effort to be better or if competitors identify tactical information and are able to apply it for their best interest.

There would be almost no incentive for a *lowgrade* coffee seller to be transparent. Usually the low quality of the product is a result of a poor supply chain: improper working conditions, low productivity, unsustainable practices etc. Simply said, when there's little to "brag" about, it is better to stay silent. The lowgrades usually compete on price. There is a market for it because their customers are also seeking low prices and are fine with the offered quality. Given the fact that a company doesn't put the effort in improving the quality of the product it sells indicates lack of management interest/capability. Being transparent requires high interest and motivation from the management, therefore it is unlikely for the management of such companies to invest in transparency, when they don't invest in quality first. Overall, it is in a coffee seller's interest to be transparent only when there is something valuable in the quality of the coffee, in the processes performed or a high commitment to become better. Many times, all of these three attributes come together, meaning that the higher the commitment to be better, the higher the quality of the processes performed and the higher the quality.

Quality is of high importance in coffee. Even though, 80-90% of the coffee on the market is mainstream quality, most brands still want to compete on quality. Transparency legitimizes the quality. Most consumers will believe more in the "high quality" statement, if this statement is supported by evidence. In the coffee supply chains the evidence, which is the result of transparency efforts comes in the following forms:

- Text description on the packaging.
- Logo of the certifications the company is affiliated with.
- QR code on the packaging, that leads the consumer to a webpage.

- Website of the coffee company.
- Reports and CSR reports.
- Social media accounts of companies.
- Other sources.

Each of these transparency forms, brings with it varying levels of credibility. Text description on packaging very often contains flashy, buzz words, such as sustainable, great taste or natural. They don't necessarily say a lot about the supply chain, but can give some indication of the quality and ethics that come with that coffee. Certifications are more meaningful in terms of credibility, given that they are third parties with their whole business model focused on enforcing better standards. Even though there is much debate on how much positive change certifications bring, they do provide a step forward in terms of transparency. Text description and certification logos on the packaging provide quick information that will be seen and used by most consumers in their purchasing decisions.

QR codes leading to a webpage or the actual website of the company can vary in terms of how much information they provide and they are not guaranteed to reach the consumer. There was no data found on how many consumers check the website of a company before they purchase coffee, but I would approximate it to be a low number of customers.

Reports and CSR reports would be expected to contain most information. It also depends if the reports are addressed to the consumers or to the shareholders, if they are finance related or sustainability related, if they are voluntarily written and published or if they had to be published due to regulation. Having all that in mind, the reliability of these reports varies. The reports can highly vary in terms of the richness of the information. A good report will include backed up facts and numbers, not just words.

Social media accounts are currently used by many companies to communicate with their customers. These accounts will reach the customers that follow these companies online, meaning a lower number of customers, compared to the total number of customers.

If we talk about B2B transparency, the information can come in multiple forms, including the ones above. There are several technology innovations that allow for unalterable traceability. Most notable one is blockchain, that is being implemented in many industries, as well as the coffee one. For example, the app Farmer Connect uses blockchain with the purpose of "humanizing each coffee drinker's relationship with their daily cup" (Mehmet, 2020). Each participant in the supply chain logs the required data, then the app extracts the information from the blockchain in a way that is user friendly. The information is presented in an

interactive map and allows connectivity between consumers and the supply chain actors (Mehmet, 2020). One of the farmer owners that collaborates with Farmer Connect states: "Our work is sustainable, our farm is sustainable, but I don't know if our work is really seen around the world. With blockchain our consumers can see that we are sustainable."

- Ana Maria Donneys, Owner of El Porvenir Coffee Farm (Farmers Connect, 2020).

Blockchain simplifies the exchange and tracking of information and payments and enables greater trust thanks to the unalterable digitalized chain (Mehmet, 2020). Besides trust, the supply chain can financially gain from the donations made by the consumers. The app allows donations towards the farmer or to the farmer communities, so that the consumers that want to further support the farmers can easily do so through the app.

On the other end of the supply chain, farmers can receive feedback from the end consumer, rather than wait for the validation of all the actors in between. The farmers can assess whether they did a good job remarkably faster, allowing them to change undesirable practices.

4. DESIRABLE ATTRIBUTES IN COFFEE

Next question would be what are desirable attributes in coffee that consumers, especially the ethical ones, are looking for. For the consumers to be appreciative of the product, the transparency efforts will have to be focused on these desired attributes.

Besides different levels of thickness, acidity, flavor, aroma and roast, which are preference based for every consumer, there are attributes regarding the processes in the supply chain that enhance the quality. To have these attributes might require a higher investment and a higher price payed by the end consumer, but they are better from a social and environmental point of view and usually result in higher quality:

- Organic. Organic coffee is grown without pesticides and herbicides. These chemicals
 threaten insect populations, contaminate water sources and can have ecosystem-wide
 misbalancing effects (Ethical Consumer, 2019). Besides that, they can be harmful for
 human health.
- Shade-grown and bird-friendly. Coffee can be grown two ways: sun-grown, with the tree exposed to sun light during the entire day or shade-grown with the coffee tree growing under canopy trees and receiving less sunlight. Shade coffee plantations are

better, thanks to their ability to conserve biodiversity, reduce soil erosion, produce clean water and mitigate some effects of climate change (Bacon et al., 2008). Even though the sun-grown coffee plantations have a higher yield in the short run, in the long run they can have destructive effects on the environment and are more prone to disease, which will decrease the yields.

- Biodegradable packaging or no unnecessary packaging. A lot of the coffee is consumed in coffee pods that are made from plastic. Besides that, coffee beans or grinded coffee usually come in plastic packaging. Even though this plastic can be recycled, it rarely is. The aim would be to reduce the amount of plastic as much as possible by buying coffee packed in alternative packaging, such as biodegradable coffee pods or bags, not going for the plastic to-go cup. If plastic is unavoidable plastic which is made from recycled plastic would be a better alternative. Even though carton-based packaging is biodegradable, its' production still requires resources, so limiting that should also be an aim.
- Fairly-traded. A lot of the environmental and low quality problems stem from one social issue - low payment of farmers. Small-holder farmers account for approximately two-thirds of the world's poor (Carter et al., 2017). They are the main source of food supply in most developing countries (Carter et al., 2017) and their economic stability or growth highly influences the well-being and economy of the whole community. It is very important to ensure fair trade and pay the farmers more than their cost of production. That allows for a fair trade and responsible remuneration for their work, it facilitates investment in processes that are more efficient and eco-friendlier (such as organic or shade-grown) and it sustains the future of the whole industry. There is a problem regarding not enough workforce for future coffee farming, due to youth not being attracted to pursue a career in this industry. The market volatility, lack of economic viability, youth immigration, lack of industry investment are the reasons why some people are worried that there will not be enough workforce to support the future of the coffee farming (Furgiuele et al., 2020). By buying fairly-traded coffee, a lot of problems can be solved. I expect some of the current transparency initiatives to be on this specific issue. In the next paragraph, I will discuss the reasons why low payment of farmers is an ongoing reality.
- Certifications. Certifications are "verified transparency". They have the purpose of
 helping the supply chain, in particular the farmer, with both economic and
 environmental issues and prove that to the consumer, by allowing the coffee company
 to print the certification logo on the package. Certifications have an important role in

the decision making of consumers and have been steadily penetrating the market (International Trade Center, 2011). Certifications automatically imply transparency, since companies need to be able to collect and offer their data to the certifying body, or the certifying bodies collect the data themselves. Coffee brands selling certified coffee have already made a huge step in their transparency initiatives. The most influential coffee certifications are Organic, Fair Trade Certified, Rainforest Alliance, Smithsonian Bird Friendly, Utz Certified and the Common Code for the Coffee (Community SCAA Sustainability Committee, 2009). The certifications are differently distributed in terms of the location of the certified farms, as well as the location of the selling markets (Community SCAA Sustainability Committee, 2009). They all have individual and overlapping goals, such as sustainable agriculture that supports soil health and biodiversity, better life for farming families and community development, research and promotion of shade coffee, global leadership etc. (Community SCAA Sustainability Committee, 2009).

Another important feature that impacts the quality of coffee and might be of relevance for certain consumers is the *land of origin*, meaning the location of where the coffee cherries have been grown. There is no general desirable land of origin, unless some consumers prefer a certain location, because of taste or wish to support a certain country's economy. The five largest producing countries are Brazil, Vietnam, Colombia, Indonesia and Ethiopia, with Brazil producing more than the next following four combined (Shahbandeh, 2019).

5. Power dynamics and value creation in the coffee supply chain

A recurring problem in the coffee supply chain is indecent pay of farmers. Coffee farmers have been expressing their frustration for many years now, calling the rest of the value chain to action (Cycon et al, 2019). In the 2019 declaration from the World Coffee Producers forum the producers again stated that "by allowing the impoverishment of producers, the coffee industry is compromising its' own future" (Cycon et al, 2019). It was also added that "an approach based on the principle of co-responsibility and total transparency must be implemented to ensure that all the links of the value chain are profitable and healthy" (Cycon et al, 2019).

One of the biggest reasons for why this is a reality is chronic oversupply of coffee (Ponte, 2002). Between 1962 and 1989, the coffee market was regulated by the International Coffee Agreement,

which was a regulatory system responsible for setting up the price for coffee and gave each country its' quota (Ponte, 2002). This way, there would not be excess amount of coffee that would inevitably push prices down. If prices were too high, quotas were relaxed and if they were too low, then quotas would be tightened. Although the system had its drawbacks, most analysts recognize its effectiveness in price stabilization (Ponte, 2002). In 1989, the International Coffee Organization (further referred to as ICO) failed to reach a new agreement, partly due to Brazil's withdrawal from the system. That lead to several negative changes in the supply chain of coffee, including oversupply of coffee, lowered prices, increased price volatility and increased concentration of actors in the supply chain, meaning that smaller companies would not survive, while the bigger ones would get even bigger.

ICO reached a new agreement again in 2007 and it is still continuing its' activity. Despite efforts done by the ICO, prices payed to farmers are still unacceptably low. The price in 2018 was 30% lower than the average price of the last 10 years and it is the lowest in the last 15 years (International Coffee Organization, 2018). ICO states that farmers' cost of production is increasing (labour, fertilizer, land) and since prices stay low some farmers don't make enough money to survive.

Another reason why the price payed to the farmers is so low, is that the value added along the supply chain takes place more and more in consuming countries (Daviron & Ponte, 2005).

"Consumers pay proportionally less for the material attributes of coffee quality, and more for their symbolic and in-person service attributes – including branding, packaging, consumption ambience and sustainability content" (Daviron & Ponte, 2005, p.30).

This appreciation for the symbolic value of a product, rather than its' intrinsic quality is not attributable only to coffee, but to many other material possessions. Even though symbolic and service attributes are valuable, it is unfair that they are more financially appreciated, then the very product. By putting more emphasis on transparency and where the coffee comes from, consumers can put a symbolic value on the story behind their coffee. In this way, origin is more appreciated and there is a potential increase in profits for the farmers. Some experts argue that farmers need to sell their story better if they want to extract more profits from the value chain.

The amount that farmers get for the coffee beans they sell is 1 cent of USD per cup (0.01 \$), while the average price for an espresso in Denmark is around 3 euro (3.25 \$). It should be noted that there is a significant difference between the cost of living and there are multiple supply chain actors in between Denmark and the farmers. However, it is still a striking difference of price.

The coffee market is characterized by high price volatility due to dependency on temperature, rainfalls, disease and the long delay between planting and production (Ponte, 2002). During the ICA regime the price volatility was held under control at 20.3 %. After the collapse of the ICA, the price volatility increased to 30% and then returned back to 21.1 % (International Coffee Organization, 2018). The higher the volatility, the more uncertainty would be experienced by the farmers.

If we look in more detail at the supply chain of coffee, it has a lot of competition on the farmer level and then the competition decreases the closer we come to the consumer. If one looks at Figure 3 below by Ponte (2002), one can see the links through which coffee travels to the end consumer. In the following paragraphs, I will focus on the following actors: farmers -> international traders -> roasters -> consumers.

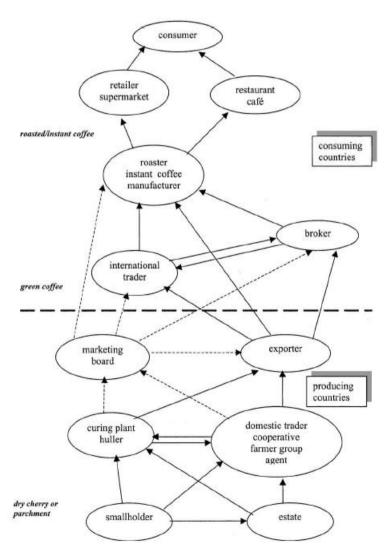


Figure 3: Supply chain of coffee; Source: Ponte (2002)

There are approximately 25 million farmers and their families, that are the first link in the supply chain. Usually they don't produce enough, as well as don't have the proper communication links to do direct business with retailers. Therefore, the international traders have an important role of collecting the necessary amounts of coffee from all the farms/cooperatives/exporters, to be able to make big-scale deals with the roasters. After the collapse of the ICA in 1989, the market controlled by traders has become more concentrated. "[The] mid-sized traders with unhedged positions [...] found themselves too small to compete with larger ones" (Ponte, 2002, p. 1107). The two biggest trading companies, Neumann and Volcafe had 29% of the market in 1998, as it can be seen in the graph below. No current data that was free of charge was found.

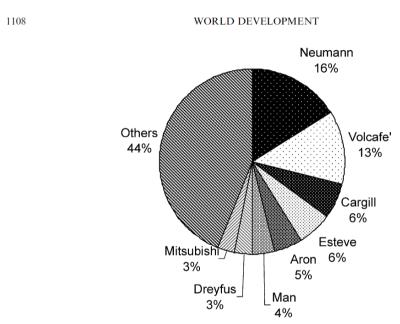


Figure 4. Green coffee market share by international trade company (1998), in percentage. Source: van Dijk et al. (1998, p. 34).

Figure 4: International traders of green coffee beans, by market share; Source: Ponte (2002).

Even more concentration was experienced at the roaster level. The reasons of increased control of roasters is oversupply, flexibility in blending and implementation of supplier managed inventory (Ponte, 2002). Since there are more traders, each with limited capacity, it is easy to switch from one trader to another and "dictate the rules of the game". Oversupply means a multitude of options to choose from, flexibility in blending means less dependency on one supplier and supplier managed inventory means more efficiency and risk transferred to the trader.

As it can be seen in the Figure 5, the two largest companies controlled 49% of the market in 1989. There was no found data free of charge regarding market share for roasters. Nonetheless, the

important message is that roasting companies have the most power in the coffee supply chain. If one needs to choose which actor in the coffee supply chain should first aim for transparency, with the sake of improving farmers' pay or improving sustainable farming practices, then it should be the roasters. Since they are the most powerful, if they would demand something, the rest of the supply chain would have no choice, but follow.

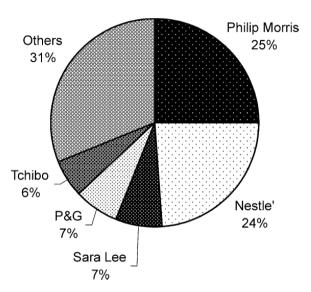


Figure 5. Market share of roasting and instant manufacturing companies (1998), in percentage. Source: van Dijk et al. (1998, p. 52).

Figure 5: Roasters and instant manufacturing companies, by market share; Source: Ponte (2002).

However, the reality is that roasters are not as transparent as some consumers want them to be. They compete on both quality and price. Transparency requires a lot of commitment from the management side, support of shareholders, investments to implement transparency, as well as investments for the improvement of business practices. Otherwise, transparency in a "bad" supply chain will act against the roaster. On the other hand, roasters might be afraid of losing customers if the price of their coffee increases (due to the transparency costs), therefore they just stick to the status quo.

That leads us again to the coffee consumers and whether they are willing to pay more for their coffee and demand better supply chains. The market share for certified coffee and specialty coffee keeps on growing, thanks to consumers that are willing to pay more. Before moving further with the next chapter that focuses on the coffee culture in Denmark and the rise of specialty coffee, a few notes about farmer cooperatives should be added.

Farmers cooperatives are organizations that represent small and medium sized farmers. In Nicaragua, these cooperatives have "provided valuable economic, political and legal support to small-scale farmers seeking to defend their land against speculators, large landholders and high debts" (Bacon et al., 2008, p. 268). These cooperatives or unions have supported the farmers with more than just business-related issues and technical assistance, they have also provided schooling scholarships and limited support for health care and housing (Bacon et al., 2008). Bacon et al. (2008) argue that cooperatives serve as connectors between small-scale farmers and buyers of certified and specialty coffee and can positively improve farmers' financial stability.

To conclude, the biggest causes of indecent payment of farmers are *oversupply* of coffee and highly *concentrated market* at the roaster level (Daviron & Ponte, 2005). On top of that we have lack of knowledge, communication and transparency along the supply chain, which worsen the other two problems. Each actor in the supply chain of coffee has its' share of responsibility and power to improve things. Farmers are stronger when they unite. Consumers support better practices and better pay, when they inform themselves and are willing to pay more. Roasters can make a significant positive impact, by demanding better practices upstream in the supply chain and paying farmers more. The purpose of transparency would be to create more awareness regarding these problems, facilitate and even "force" better communication between supply chain actors and empower some to create positive change in the supply chain, by tackling the mentioned above problems.

6. Specialty coffee

Despite the frustration of many coffee experts, coffee beans are treated as a commodity. Most coffee is sold at prices close to the ICO set indicator prices. Many coffee experts state that this goes against the nature of coffee, which is being unique. There are many variables influencing coffee's quality, resulting in a wide range of product types that are not homogeneous. Being treated as a commodity, coffee becomes a standardized product, not fully appreciated by consumers and the rest of the industry.

As the research done by Transparent Trade Coffee (2019), the mainstream coffee price does not truly indicate its quality. Coffee sold on alternative markets will pay a significant price premium, if the quality is on the higher range.

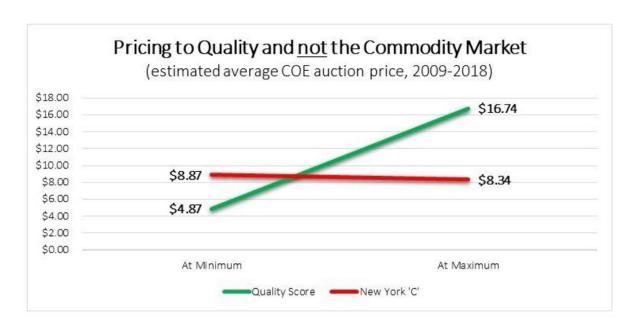


Figure 6: Pricing to Quality and not the Commodity market; Source: Transparent Trade Coffee (2019)

Ponte (2002) explains how coffee became more commoditized, hand in hand with its' quality decreasing. As the demand for coffee was growing during the 80's and 90's, the roasters became part of major industrial empires and changed focus from quality and locality to consistency in flavor, packaging and price (Ponte, 2002). At this point in time, blending technologies expanded, as the roasters were aiming for big quantities of the same flavor.

As a response to the decreasing quality, the niche market for *specialty coffee* has grown. Specialty coffee is the one that falls within the exemplary or high-quality categories mentioned above. It needs to receive a grade between 80% and 100% on the coffee review scale to be classified as such. Specialty coffee requires high standards for all the processes through which the coffee is processed. It sells for a higher price than the mainstream quality and it pays more focus on the individuality of each harvest. Specialty coffee roasters are usually transparent in regards to some of their activities, especially land of origin, processing methods and even detail about the life of the farmers with which they trade. The consumers of specialty coffee pay more for their coffee, but they also expect higher quality and to be able to check how their coffee came to be of that quality.

A way to ensure a reliable supply of high-quality coffee is to communicate directly with the farmers. That is usually done through visits to the farm by roasters from a consuming country and having a more personal interaction. The result of that is *directly traded coffee*. By skipping all the

middle men in the supply chain, directly traded coffee ensures higher quality, higher payment of farmers, investment in sustainable farming practices, better communication and less effort in traceability and transparency. There are no general guidelines on what exact standards need to be fulfilled in order to label one's coffee "direct trade". In Denmark however, the company The Coffee Collective registered in 2007 the term DirectTrade® as a trademark. To be able to label one's coffee DirectTrade® in Denmark, a company needs to fulfill Coffee Collective's two criteria. Firstly, the producer needs to be paid at least 25% more than the Fair Trade price and secondly, The Coffee Collective will do a check-up visit to the producer every year (Schroeder, 2015).

Similar to direct trade coffee is *single origin coffee*. Many times, direct trade will imply single origin, if the roasters don't blend the beans. Single origin indicates that the coffee was sourced from one producer, crop, region or country. Single origin, as well as direct trade automatically have some traceability thanks to the closer interaction with the farmer, compared to the usual supply chain. It will usually be in their interest to be as transparent as possible and provide information about the farm, the famers and their family/community and the crop and quality of coffee. This type of information provides that extra value for which specialty coffee drinkers pay extra.

"The most important thing about single origin is its traceability, the fact that you know exactly where your coffee is from and that it's a specific coffee, not a blend. Usually of a higher quality, it's the acknowledgment that the coffee is from a particular farm located in a unique setting, whilst its flavor depicts its origin, possessing characteristics of that specific area where the particular coffee was grown."

-Andra Vlaicu, Communication Manager at Specialty Coffee Association (Pipunic, 2020)

Specialty coffee roasters are setting a good example for the rest of the industry, because of

- Their focus on quality and individuality of coffee;
- Paying price premiums to the farmers and long-lasting partnerships;
- Investing back to the farm and helping with knowledge and technology, knowing that this will be profitable in the long-run;
- Focus on ethical trading and sustainable coffee processes;
- Traceability and transparency with their suppliers.

• Facilitate market fragmentation, which is good for overall competition in the industry.

7. COFFEE CULTURE IN DENMARK

Coffee is a big part of the Danish culture. Some call coffee the national drink of the Nordic countries, since Finland, Norway, Iceland, Sweden and Denmark are in the top ten consuming nations, measured by consumption per capita (Brown, 2019), with Danes consuming 8.7 kg of coffee per capita in 2019 (CBI, 2020), that accounting for 1.46 cups of coffee per day. The largest supplier of green coffee beans in Scandinavia is Brazil (CBI, 2020).

There is a growing interest in high quality coffee, given the increasing levels of health awareness in Denmark (Euromonitor International, 2019). Danes prefer their coffee consumed black, without milk or sugar, making quality a very important attribute (CBI, 2020). As a result, there are high imports of Arabica and lower ones of Robusta. Certified coffee is gaining more popularity, with most popular certifications being Rainforest Alliance, UTZ, Organic and Fairtrade (CBI, 2020). Another unsurprising trend is the growth of the specialty coffee market. Besides health awareness, another reason is out-of-home consumption of coffee. The café culture, where people meet and/or work over a cup of coffee in a cozy café is becoming more popular. Compared to the rest of Europe in 2018, Denmark registered the highest rate of new opened coffee shops: 14.5% (CBI, 2020).

The largest roasting companies, in terms of retail value sales are Merrild Kaffee, BKI foods, Jacobs Douwe Egberts DK and Nestlé Danmark (Euromonitor International, 2019). The largest coffee chains are Espresso House and Joe & The Juice (CBI, 2020). It is expected that progressively more of the market share will be taken by private labels (or store brands) (Euromonitor International, 2019), as well as specialty coffee (CBI, 2020).

METHODOLOGY

My research topic and motivation were inspired by Sodhi's et al. (2019) paper on research opportunities in supply chain transparency. The paper is a guideline for other researchers to explore the topic of transparency from different angles. I have applied some of the knowledge presented in the article to a specific market: the Danish coffee market. Because of my current location, I chose to focus on the Danish market, this way gaining easy access to the data needed. I chose the coffee industry, because the industry is known to have an unsatisfactory market misbalance, which has a negative impact on the life quality of coffee farmers and the environment. I did not expect to discover such a complex supply chain governance and did not know the seriousness of the problems surrounding the coffee industry. The literature review has further expanded my interest in understanding where the Danish coffee sellers stand with transparency.

The main research question of this study is:

What is the level of transparency that Danish coffee sellers offer to their customers?

With the sub-question:

What is the reasoning behind having this level of transparency?

There were no articles found on transparency strategies of Danish coffee sellers. As a preparation to answer these questions, in the literature review I have explored two major themes: transparency and coffee supply chains, with the ultimate purpose of finding whether the industry can benefit from transparency. I have been able to answer the following questions:

- What is transparency?
- What are the risks and benefits that come with it?
- What are the problems is the coffee industry?
- Is there a need for transparency in coffee supply chains?
- What are the current trends in the Danish coffee market?

Having that in mind, I chose how to proceed further in analyzing transparency, voluntarily disclosed by the Danish coffee sellers. In the paragraphs below, I explain my decisions regarding the research approach, design and the problems of reliability and validity that come with my methods' choice.

RESEARCH PHILOSOPHY

In this study I take an *interpretivist* approach. I stand by the idea that "human beings and their social worlds cannot be studied in the same way as physical phenomena", otherwise "rich insights are lost" (Saunders et al., 1997). To capture the full complexity of what I am studying – the level of transparency - I take the perspective of coffee customers in Denmark, that look at how much they can find out from the voluntary disclosure from the sellers' side. I acknowledge that my own values and norms "play an important role in the research process" (Saunders et al., 1997).

Ontology	Epistemology	Axiology	Methods
Nature of reality	Acceptable knowledge	Values of the researcher	Small sample, in-
is complex, rich	are narratives,	matter. Researcher	depth investigations,
and socially-	perceptions and	interpretations are key to	qualitative methods.
constructed.	interpretations.	final contribution.	

Table 1. Research philosophy. Guided by Saunders et al. (1997).

The research aim of this study is to expand the scientific understanding on transparency in the coffee market in Denmark, hence the research can be categorized as *basic*, rather than applied (McCombes, 2020). I describe and categorize the levels of transparency found on the coffee market, making the research of an *exploratory* nature, rather than explanatory (McCombes, 2020). The research approach is *abductive*, since it has both elements of deductive and inductive research approaches. I base some of my findings on existing theories or knowledge (types of transparency information, desirable attributes of coffee, problems in the coffee supply chain etc.), making this part of the research deductive. I am able to confirm the application of some of this knowledge onto the coffee market in Denmark. Concomitantly, because of little to no existing literature specifically on the transparency of Danish coffee sellers, I use an inductive approach. I use observation to identify new patterns, which allow me the development of new categorizations of transparency.

RESEARCH STRATEGY

One could take different perspectives when analyzing transparency in the coffee supply chains. One can look at B2B (business to business) transparency, or at B2C (business to customer) transparency. I chose the B2C transparency for two main reasons:

- 1. As discussed in the literature review, consumers can highly determine the success or failure of a company/industry. The power that the consumers hold in the coffee supply chain motivated me to go for the B2C transparency.
- 2. There is more accessible data in regards to B2C, rather than B2B.

The researcher can choose to focus on any of the nodes (companies) or links (interaction) in the supply chain. I focus on the coffee roaster/instant coffee manufacturers. These companies are the coffee brands that sell coffee through different selling channels. Throughout this paper, I refer to them as coffee sellers (or coffee roasters), since they produce the final product that is being sold. The reasons for choosing the roaster/instant coffee manufacturer are:

- 1. As discussed in the literature review, roasters have the highest concentration in the coffee supply chain and the power to change the status quo.
- 2. Besides the supermarkets, cafes or other selling channels, the roasters are the closest link to consumers, which allows me to explore the B2C transparency.
- 3. There is more data available for me, given my cultural and locational circumstances, on roasters, compared to the other companies in the supply chain.

My initial strategy was to explore transparency from the companies' perspective. I wanted to understand why they strategically chose higher or lower transparency. Unfortunately, I have not been able to gain access to managements' perspective. I have contacted the following eight companies: The Coffee Collective, BKI foods, Copenhagen Coffee Lab, Kaffeekapslen, Rigtig Kaffee, Det Vide Hus, Coffee Connect, Get Coffee. I have focused my initial search on smaller companies (besides BKI foods) in the hope that they would be more receptive. Unfortunately, I have not received a positive answer from either of them. Kaffekapslen, Copenhagen Coffee Lab and the Coffee Collective have replied back stating that the current situation with COVID-19 is not allowing them to focus on external research, since they have to focus on dealing best with the current situation. The Coffee Collective expressed their willingness to collaborate after the difficult period was over, sometime in summer. I couldn't take advantage of their offer, due to the deadline of the paper.

The emails were sent in the same period when the Danish government announced the country's lockdown, cafes needed to be temporarily closed and no meetings above 10 people were allowed. The unfortunate timing that put pressure on the coffee businesses, as well as the fact that transparency strategy is something companies might be cautious about sharing, didn't allow me to pursue my initial research strategy. Instead, I have opted to still look at the Danish coffee roasters,

but from the eyes of a "concerned" consumer. I take the perspective of a consumer in Denmark, that wants to make an informed coffee purchase by checking how much information can he/she find that was voluntarily made available by the coffee sellers.

RESEARCH DESIGN

By putting myself in the shoes of a consumer, I have decided to analyze three sources of information that most consumers in Denmark have access to: the package of the coffee product, the company's website and accessible reports online. Since I look at voluntary disclosure of the coffee sellers, all of the three sources of information are mediums through which the companies have a chance to be transparent towards their consumers regarding anything they want to share.

Originally, I have included a fourth source of information, which was any other valuable information provided by a third party that accuses/calls to action any of the coffee sellers. I have later decided to skip this fourth source, because of two reasons:

- 1. There was no such information that directly accused any of the chosen companies.
- 2. By limiting the information sources to packaging, website and reports, I have a clear delimitation of analyzing voluntary disclosure only, rather than all kinds of disclosure. The voluntary disclosure sheds light on companies' transparency strategies which is as close as I could get to my original research strategy.

One can argue that the gradual nature of the three information sources comes hand in hand with how much effort consumers put into searching for information. There are consumers that don't bother to look past the packaging, then there are consumers that will put the effort into going one step further and checking the company's website. Only a few consumers will bother to look through reports. There is no data on how many consumers reach these sources of information to understand the impact of each source. There are many review websites or social media accounts, from which consumers base their purchasing decisions. Because there are so many of these types of websites, I chose to limit the research to sources of information that companies have full control over.

When I collect the information retrieved from products, websites and reports, I do not intend to analyze all the small bits and pieces of information. The purpose is getting the general picture, an overview of the level of transparency they offer. I select all information that is valuable in terms of

giving the consumer a better understanding of the quality of the product and what company and supply chain they are supporting.

To be able to get the big picture on the Danish coffee market, I had to choose which companies to analyze. For that, I have visited three stores that have a strong presence in the Danish retail market: Føtex, Lidl and Netto. I have analyzed which coffee brands have a strong presence in all visited stores, which lead me to choose BKI foods, Merrild Kaffe and Peter Larsen Kaffe.

Since not all companies (especially specialty coffee companies) sell their coffee through retail stores, I have also looked online for brands that have a strong presence on the specialty coffee market. I wanted to have a smaller company that doesn't sell in big quantities. In this way, I am able to get some variability in terms of size and possibly transparency strategies. That lead me to The Coffee Collective, which is a leading company in the specialty and direct trade coffee sector in Denmark. By having three typical brands, which all vary in size, plus an alternative brand, I try to the best of my ability to represent the coffee market through the lenses of these four companies. Four is a low sample size, which allows for very limited generalizability of the entire coffee market. Nonetheless, the analysis still creates a good picture on where the companies stand in terms of transparency. As one can see from the table below, the profits and size of these companies vary. The analysis will later reveal that their transparency levels also vary.

Since public and private limited companies in Denmark have to disclose their financial information, I have gathered information on net sales, net profits and number of employees. The purpose of this table is to create an overview on the financial success of the analyzed companies, as well as the variance in employee count and profitability.

Company name	Net sales (in 1000	Net profits (in	Number of employees
	DKK)	1000 DKK)	
Merrild Kaffe ApS	400.511	<u>9.304</u>	<u>67</u>
BKI foods A/S (year 2018)	<u>567.231</u>	26.898	<u>155</u>
Peter Larsen Kaffe A/S	_	12.444	<u>59</u>
Coffee Collective ApS		<u>1.648</u>	37 (year 2017)

Table 2. Financial figures of analyzed companies. Source: Proff, (n.d.)

All information was collected from proff.dk, which is a source of free financial information on public and private limited companies in Denmark (Proff, n.d.). All information presented is for the year 2019, unless specified otherwise. In the placed marked by the dash sign, there was no available information. BKI foods is the largest company (by both employee count and profits), but it should be noted that it has a larger selling portfolio that is not limited to coffee. The Coffee Collective is the smallest company (by both employee count and profits).

In regards to the setting of the data collection, the study is a *field* one (rather than laboratory one), because it takes place in a real-world setting. In terms of the timing of the data collection, the study is a *cross-sectional* one (rather than a longitudinal one), because my research focuses on the current situation of transparency in the coffee market, rather than changes over time.

RFI IABII ITY AND VALIDITY

The method of collecting the results is going through all the sources of information and scanning for transparency. The measurement is *reliable*, because the results achieved will consistently measure the same thing – what information did the coffee sellers provide. The results are influenced to a certain degree of who the collector of that information is.

The measurement of the level of transparency by looking at packaging, websites and reports is a *valid* one, since these are the most direct ways for a company to present their information to customers. The omittance of review platforms, social media accounts, or other platforms through which companies communicate with their customers lowers the validity of the measurement. That should be taken into account when deriving conclusions at the end of the study.

The *external validity* of the study is *limited*, due to the low number of cases. It is possible to make some generalizations about other coffee sellers operating on the Danish coffee market, since they all appeal to the same market. It would not be advised to make generalizations about transparency of coffee sellers in other countries or transparency of companies selling other kinds of products on the Danish or any other market.

RESULTS

In the following section, I present the results that measure the level of transparency of coffee sellers in Denmark. A transparent company is "a company disclosing information to the public, including consumers and investors, about upstream operations and about the products it sells to consumers" (Sodhi et al. 2019). Even though there is no categorization of how transparent a company can be, it can be easily seen that some companies are more transparent than others.

It should be noted, as mentioned in the literature review, that a lot of the companies put effort into transparency with the aim at gaining consumer *trust*, that later on translates into increased sales. Therefore, very often transparency acts as a marketing tool and that can be easily seen when analyzing the transparency level of coffee sellers. There is a blurry line between marketing and transparency, since information collected from upstream the supply chain, as well as information about the product itself, can very well be used for advertising. There is nothing wrong with that, as long as the information is not selected in such a way, that it distorts the reality. As Irwin (2015) argues, there is actually a need for better marketing from the side of ethical companies, so that they nudge consumers into buying better products. It is relative what one calls an ethical company, but the point is that there's nothing wrong with bringing out transparency and the information that comes with it to consumers, with the help of better marketing techniques. It is the companies' way of saying: "Look at our supply chain and at our practices. We are trying to do our best. Support us by buying us."

When collecting the information disclosed by the company, I try to see which of the statements are backed up by statistics, facts or clear indications. For example, a statement could be "We are pushing sustainability forward" – a message many companies try to send to their customers. Relevant questions to ask in this case is "What has the company done?" or "What does the company plan to do?" and "Are there any statistics or clear indicators that show that the company is indeed moving sustainability forward?".

Another issue, is identifying whether there is valuable information that is being omitted. As mentioned in the literature review, guilt by omission is when a company has some level of transparency, but not all the way through. In this case, there might be a reason to believe that the company is showing only the good parts of its' business and hiding the undesirable ones. When I see that a company is partially disclosing information, I state what is disclosed and what is omitted.

I look at the information provided by the chosen companies, starting with the least transparent companies Merrild Kaffe, BKI foods, Peter Larsen Kaffe and finishing with the more transparent company The Coffee Collective.

Merrild Kaffe

The Merrild brand is one of the leaders in terms of retail value sales (Euromonitor International, 2019), therefore it was not unexpected to see it available in all the visited stores. It was founded in 1964, when Møller Merrild opened Merrild's Coffee Store. Currently, the brand is a commercial subsidiary since 2015, amongst 10 others, part of the Lavazza Group (Lavazza, 2018). The brand offers several blends, to which they assign a number. The analyzed sources of information were the packages of Merrild products, the official website of Merrild, the official website of Merrild Lavazza, the official website of the Danish Veterinary and Food Administration and Merrild Kaffe ApS Annual report from 2016, audited by Ernst & Young.



Image source: Merrild Lavazza Denmark (2019)

Merrild Kaffe

Package

Merrild has a wide range of products they offer and there is some variability in between the products in terms of the amount of information on the package. Most information is aimed at showing good **quality**:

- Type of coffee (whole beans, ground or instant);
- Strength of roast;
- Other descriptive qualities of coffee (rich aftertaste, high intensity etc.). In blends number 56 and 64, the coffee has a sign indicating "hand-picked" beans.

This information was new - something not recorded in other brands. The coffee cherries can be hand-picked or machine-picked, with the former considered superior. Machine picking also harvests under or over ripe cherries, that adding unpleasant notes to the cup (Guevara, 2020). The hand-picking attribute is an indicator for the quality of the coffee and labour put into picking.

- Weight;
- Best before date;
- Packaging date;
- Contacts of the company: email, phone number;

- Land of production: Italy (that is regarding roasting, grinding or instant manufacturing, not bean cultivation);
- Type of bean: Arabica vs. Robusta;

When the blend consisted of 100% Arabica, that was visibly displayed on the front of the package. When the blend was 50% Arabica, 50% Robusta, as in the case of Blend number 162, there would be no sign;

- Certifications: European Organic, Danish Organic, UTZ Certified, Rainforest Alliance (with products having several, one or no certifications);
- Land of origin: Peru, El Salvador, Peru & Honduras, sometimes South-America
 is mentioned (with some products indicating single-origin and the name of
 the country and some others had no information regarding the
 region/country, just stated that it is outside of the EU);
- No QR codes on the packages.

Website

On the official website of Merrild Kaffe merrild.dk a consumer can go two ways: on the page focused on Merrild alone or on the page that is focused on Merrild and Lavazza. The interest of this study is focused on Merrild only; however, Lavazza being the parent company has spillover effects in regards to reputation and business practices, so both webpages will be analyzed. https://merrild-kaffe.dk/

On the Merrild page, the information was directed towards the barista culture, and other products that can be made from coffee (bread, ice-cream). The website creates this cozy café culture, that incites one to go and experiment with coffee. There is no information regarding upstream operations, besides land of origin or quality attributes (such as hand-picked) that indicate something vague about the supply chain.

There is some information regarding downstream operations. Merrild provides the names of some of its' business customers, such as Legoland, POMPdeLUX, Bauhaus and others and their opinion on why they collaborated with Merrild. There is no information regarding the other channels for sales.

In the history section, one can lean about the expansion of Merrild outside of Denmark. Merrild displays information regarding the countries where it sells its' coffee. Merrild used to be part of the Sara Lee Group and in 2015 became part of the Lavazza Group instead. The coffee is roasted and headquartered in Fredericia.

All companies analyzed were found to have one or more projects that deal with giving back to society. In Merrild's case that is the collaboration with The Danish Society for Nature Conservation, where the company will reward a school with 25.000 kr. The competition is regarding waste collection and recycling.

Further links to the social media accounts of Merrild can be found.

https://www.merrild.dk/foodservice/om-merrild-lavazza/merrild

On the Merrild and Lavazza website, a lot of the information overlaps with the previous webpage, but new information is presented.

In the history section, one can find out in more detail why Merrild separated from its' previous mother company and joined Lavazza. The EU competition authorities

gave this condition. Merrild took a one year pause and returned back on the market in 2016, after its' acquisition in 2015.

Knowing the degree of connectedness between the Lavazza and Merrild is important and this information is missing. All that is presented is that Merrild is a subsidiary of Lavazza, which means that Lavazza owns more than 50% shares of Merrild. The two companies can have very little business interaction, each one operating its' business without relying too much on the other; or, they could have a lot of interaction, with a lot of common business practices. That's why I will select the information that targets both Merrild and Lavazza, not just Lavazza alone. For more information on Lavazza, one can further expand their knowledge by referring to the official website of Lavazza or Lavazza's 2018 Sustainability Report.

Sustainability-wise, Lavazza and Merrild have the so-called "Sustainability Tree", which is based on four pillars: climate, social responsibility, rainforest preservation and agriculture protection. Here they provide information that:

- educates the consumer on coffee's impact on climate and agriculture;
- states that Lavazza was named the most sustainable food business in the world in 2019, according to a 230,000 consumers survey done by The Reputation Institute;
- points out to the Lavazza Foundation and its' activities that aim at increasing welfare, by cooperating with NGOs and ambassadors;
- presents "¡Tierra!" Lavazza's sustainability project meant to help farmers with training programs about coffee;
- talks about the importance of forest preservation and encouraging consumers to buy Rainforest Alliance certified products.

Merrild and Lavazza release every 3-4 months a magazine called Kaffetid, which is free to read for anybody landing on their webpage. The collection comprises 13 magazines. The last edition of the magazine contains information regarding The Sustainability Tree, recommendations of coffee that go in accordance with the 4 pillars of the sustainability tree, a short interview with one of Merrild and Lavazza's customers LEGOLAND, and inspiration for recipes.

Further, there is inspiration for coffee-making and coffee related activities. The information does not give any insight on the supply chain or the company itself.

Reports

Merrild has a Kontrolrapport made by the Danish Veterinary and Food Administration. The information it provides is regarding compliance with food safety regulations. This specific report is compulsory in Denmark (Danish Veterinary and Food Administration, 2019).

When searching for Merrild reports online, one can find the Annual Report of Merrild, done in 2016. The report is data collected and present by Merrild, checked by the independent auditor Ernst & Young. The main purpose of this report is attaining reasonable assurance that the financial reports of Merrild don't have misstatements, due to fraud or error.

Here, one can see some of Merrild's financial figures from 2016 and 2015, which are of relevance for people interested in finance and accounting at Merrild. More recent information can be found online on proff.com. The benefit of this report is

that it was audited by a known auditor, which increases the credibility of the numbers provided.

There is management commentary on CSR. They state that the statutory CSR of Merrild will be done at Group level, and one can read more about Lavazza as a group in Lavazza's Sustainability Report.

In terms of community projects, Merrild has:

- donated coffee to various organizations, such as Kirkens Korshær;
- donated the profits from Grøn Koncert to Muskelsvindsfonden (In English: Muscle Dystrophy Foundation);
- promoted its' ecological and sustainable products, which have seen a 94% growth in sales;
- donated its' furniture to Red Cross.

Table 3. Analysis of Merrild Kaffe

Overall, I would argue that Merrild Kaffe is good at providing information with a focus on the products, with little reference to the company itself or the supply chain. Most valuable information regarding the upstream supply chain is *land of origin* and *certifications*. Both the packaging and the websites are user-friendly and a customer can easily find the basic quality related information.

By analyzing the different products of Merrild, it can be seen how in all 3 categories that they offer (whole beans, grinded coffee or instant coffee) they have at least one product that is targeted at the more ethical consumer and another regular product. For example, in the instant coffee selection they have Merrild Instant Økologisk, which is European Certified, Danish certified, with 100% Arabica beans. The other product is Merrild Instant Gold, with no certifications and no information about the types of beans on the packaging, but only on the website – 40% Robusta, 60% Arabica. In this study, prices were not taken into consideration, but for this case specifically I checked whether there was a price difference and indeed there was a 20 kr. price difference in the supermarket Føtex. Consumers that care more about the ethics and quality of coffee are possibly willing to pay more and Merrild Instant Økologisk is targeted towards them. The other product is targeted to the rest of the consumers that are either less concerned or more price sensitive.

Regarding the Annual Report in 2016, there is no clear indication why this report is being published online. It is the first result on Google, when searching for Merrild report. It is not a user-friendly report and Merrild could have done a much better job in presenting some of the CSR information (the donations) from the report on the website.

Lavazza's report was looked over, but not presented in the table above. The reason for that is that the report focuses on Lavazza and its' 11 subsidiaries, Merrild therefore having a small and

unclear impact on the Lavazza's results. One could go more in depth with the analysis and look at Lavazza. There is the risk of guilt by association. For example, in case Lavazza does something unethical, the bad reputation could spill over the Merrild brand. On the other hand, the cooperation with Lavazza helps Merrild in terms of marketing its' coffee as the perfect Italian drink.

Regarding the supply chain, there was very limited transparency. There was no information regarding costs in the supply chain, payment of farmers and no environmental targets set by Merrild. The only information provided on some of the products is land of production that indicates that the roasting and packaging are done in Italy; and land of origin, which is an indicator regarding which countries Merrild sources its' coffee from.

BKI foods

BKI, which stands for Brazil Kaffe Import, is another part of the big four brands in Denmark. It was founded in 1960 by Svend Mathiesen and has steadily grown since (BKI FOODS, n.d.). BKI calls itself the largest coffee supplier in Denmark (BKI FOODS, n.d.) and its' products were sold in all the visited stores. Even though its' activity started with coffee, it has diversified its' portfolio with food, hence the addition to the name "foods" in its' name (BKI FOODS, n.d.). The brand offers a variety of coffee types and blends. The analyzed sources of information were the packages of BKI products, the official website of BKI, and the official website of the Danish Veterinary and Food Administration.



Image source: BKI FOODS (n.d.).

BKI foods

Package

BKI has a wide range of products, with some variety regarding information on the packaging. Besides selling coffee under the BKI logo, the company also owns other ranges of products: Black Coffee Roasters (also found in the stores) and Mountain (found online only, meant for business customers). In packaging analysis, I will only focus on the main line of BKI product range, that sells under the BKI logo.

The information provided is again aimed at sending the **quality** message, but compared to Merrild, BKI has currently improved its' packaging, in regards to which they are very "vocal". The type of information one can find on the package is:

- Weight;
- Best before date;
- Packaging date;
- Contacts of the company: address of the company;
- Roasting and packaging: Højberg;
- Type of bean: Arabica vs. Robusta;
- Type of coffee (whole beans, ground or instant);
- Strength of roast;
- Other descriptive qualities of coffee;
- Its' new packaging improvement, regarding lower (15%) usage of packing material, lower CO2 (23%), extraction of the metal, which allows for the recycling of the package material with plastics. There is also a link for a webpage with more information on the issue;
- Certifications: European Organic, Danish Organic, UTZ Certified, Rainforest Alliance, Fairtrade (with products having several, one or no certifications);
- Land of origin: on some products it is stated that the coffee is imported from all over the world; on a few others it is stated Colombia, Brazil;
- No QR codes on the packages.

Website

BKI has more information on its' website, compared to Merrild.

There is a history section, where one can learn about the reason of BKI's location Højbjerg: it is close to the strategic port of Aarhus. BKI was the first seller to sell organic labeled coffee in 1988. That is an indicator regarding the company's desire to be more environmentally friendly, as well as have "healthier" coffee. There is further information regarding BKI being ISO 9001, HACCP and IFS standards certified. These certifications have not been mentioned by the other analyzed brands. These certifications deal mainly with food safety, while IFS also looks into how "to meet new requirements for quality, transparency and efficiency" (IFS Management GmbH, 2020). Even though there is no further information about the compliance with IFS standards, it is still an important indicator of the company's initiative to be more transparent, efficient, offering quality products.

There is transparency regarding the ownership. Firstly, BKI is proud to be 100% Danish-owned, as well as keeping its' production facilities in Denmark, in this way creating workplaces for people in Denmark. It is also transparent about the recent acquisitions of Aalborg Kaffeimport and Herning Kafferisteri, as well as becoming a co-owner of Copenhagen-based Special Risteri Kontra Coffee.

There is menu tag dedicated to CSR, that includes accountability policy, supplier management, environment and climate, employee satisfaction and the certifications to which some of their products abide. In here, they write about their core values, their Supplier Code of Conduct to which their suppliers must abide, the numbers for CO2 emissions that have considerably gone down since 2015, their work on

environmental improvements, such as packaging optimization, use of intelligent LED lighting and replacement of production machines.

BKI is transparent regarding employee satisfaction, that being one of their core values. They conduct an annual employee satisfaction survey and say that the average employee satisfaction has increased in the past years. There is no actual data on the survey (template or score), but they have won "Danmarks Bedste Arbejdsplader" (Denmark's best working place) in 2015 and have links to videos with their employees talking about how it is to work at BKI.

It is stated that BKI offers support for social work organizations, by providing free coffee to them. They give the names of the organizations they have supported previously and a form through which an organization can apply for sponsorship. Having transparency on sponsorships is a good thing, since it facilitates cooperation and development in the business community.

The website has another tab dedicated to describing the processes needed for the customers to receive their coffee. Most of the information is not exceptionally new – the same processes discussed in the literature review apply. But there are a few things one can learn about BKI's supply chain, such as:

- testing the coffee sample 3 times before a big order is shipped and then once again before being dispatched to the customers;
- using two shakers for their roasting a plate shaker and a drum shaker;
- using a freeze-drying technique for the manufacture of instant coffee.

Such information might be of interest to some customers or other stakeholders highly interested in quality of manufacturing/roasting.

There are other tabs with the purpose of educating the consumer regarding what influences the quality of coffee, some information on the main coffee-growing countries, history of coffee and other topics. Again, for coffee experts or people with knowledge about coffee, there is nothing new, but a customer could learn some things by exploring BKI's webpage.

There is information about the tax charges BKI needs to pay for its' coffee sales in different forms. The given measurement is fee per kg of coffee. What is not displayed is the total amount of money payed to the authorities, in this way not disclosing the quantity BKI sells.

Reports

BKI does not publish a CSR report, however the information that one would find in a CSR report is well presented on their website.

BKI's Code of Conduct, that can be found on their website, sheds light on BKI's approach to interacting with its suppliers and the issues they are most concerned with. The Code is a two-page file that contains:

Purpose and Principles. The purpose of the code is "to ensure that our suppliers operate in accordance with internationally recognised minimum standards for managing adverse impacts on human rights, including labour rights, environmental, and anti-corruption principles" (BKI FOODS, 2016, p.1). The aim is to cooperate with suppliers, in an effort to continuously improve the business practices, rather than terminating a business relationship between BKI and its' suppliers in case of non-compliance. Termination of business will happen if the supplier "shows no willingness or ability to

- prevent or mitigate identified adverse impacts" (BKI FOODS, 2016, p.1). Further standards for what they consider human rights, environmental principles and anti-corruption principles are given.
- Implementation of Code. BKI's suppliers are expected to "maintain appropriate records to demonstrate compliance with the requirements of this Code" (BKI FOODS, 2016, p.2). The suppliers need to be ready to always cooperate with BKI regarding the set principles, as well as make sure that their immediate suppliers also follow the code's principles.

The publication of this code is a courageous step forward transparency-wise, given the fact that it exposes the dynamics between BKI and its' suppliers. In case one of BKI's suppliers is found to have issues with human rights, environmental or anti-corruption principles, BKI will also experience some level of doubt or mistrust from its' stakeholders.

BKI also has a Kontrolrapport made by the Danish Veterinary and Food Administration.

Table 4. Analysis of BKI.

At first glance, BKI looks like one of the cheap brands that wouldn't put much effort into transparency. That is not exactly the case, as it can be seen from the table above. BKI provides a certain degree of transparency regarding the processes done to ensure the coffee quality, its' efforts in being a good employer, reducing its' environmental footprint, ensuring compliance with standards throughout the supply chain and other relevant information. As a consumer interested in BKI, one can learn quite a bit about the internal situation at BKI.

An interesting remark is that BKI started because of the unsatisfaction with the mismatch between the raw large production of coffee (and its' low prices) and the high Danish prices. As a result, BKI started selling good Brazilian coffee "at reasonable prices". BKI offers relatively cheaper coffee compared to other brands. The low-price strategy is different compared to the trend of increasing the prices of coffee sold to consumer, so that the farmers get payed more. Unfortunately, no actual costs are published, such as the margin acquired by BKI or the farmers.

Regarding supply chain transparency, we have the Code of Conduct, which is a good indicator for commitment of doing good business not only inside the company, but further down the supply chain. We also know the countries from which *some* of the coffee comes from. Besides that, there is no information on who the suppliers are or farmer's payment.

Peter Larsen Kaffe

The Peter Larsen Kaffe brand was available in all the visited stores. It is not affiliated with one of the big four of Denmark. It has been founded in 1902 by Peter Larsen. It is a Danish brand, owned by the Bertelsen family and the Lofberg Coffee Group. It's size in terms of number of employees and profits is close to Merrild Kaffe. Its' product range can be divided into two categories: the products that are sold in supermarkets that generate most of the company's sales, and a line of products called Peter Larsen Special, which offers specialty coffee and was only seen to be sold online. The analyzed sources of information were the packages of Peter Larsen Kaffe products, the official website of the company, the 2018 Statusrapport (in English: progress report) retrieved from the official webpage and the official website of the Danish Veterinary and Food Administration.



Image source: Peter Larsen Coffee (n.d.)

Peter Larsen Kaffe

Package

For this section, I will focus on the products of Peter Larsen Coffee found in supermarkets and will exclude the Peter Larsen Special line. The following characteristics were found on the package:

- Weight;
- Best before date;
- Packaging date;
- Contacts of the company: address of the company, phone number, website;
- Type of bean: Arabica vs. Robusta;
- Type of coffee (whole beans, ground, instant, coffee capsules, iced coffee or cold brew);
- Strength of roast;
- Other descriptive qualities of coffee;
- Certifications: European Organic, Danish Organic, Rainforest Alliance,
 Fairtrade (with products having several, one or no certifications).

Some products with the Rainforest Alliance only have to have 30% of the coffee certified. Consumers that don't bother to read the small text underneath the certification logo can be mislead by the sign.

 Land of origin: some products have indicated on them South America, Central America, East Africa, other products have more specific locations, like Nicaragua, Kenya, Mexico and finally there's "The Next Generation Coffee" line with 3 products that have both the name of the country and the town, for example: Kenya, Othaya; Antioquia, Colombia or Mbeya, Tanzania. The more specific the location, the more transparency there is regarding where the coffee is from. Indicating the name of the town means single origin, which is a good thing regarding multiple aspects, as discussed in the literature review.

A product has a name that can be misleading for some consumers, for example "Java Colombia". One would assume the coffee is from Colombia, unless they check the back of the package where it is stated that the origin is South America, Central America and East Africa.

- For some of the products, which are part of "The Next Generation Coffee" line, there are indicated quotes of the people working on the farm, including their names.
- No QR codes on the packages.

Website

https://www.peterlarsenkaffe.dk/

The website of Peter Larsen Kaffe (further denoted as PLK) is user – friendly and has a tab for accountability ("ansvarlighed" in Danish), where they have four categories: Social responsibility, Next Generation Coffee, Knus Kræft (in English: Crush Cancer) and From Bean to Biomass.

In the social responsibility tab, one can find a lot of information, starting with the sustainability report, which will be discussed next, in the "Reports" section of this table. PLK states its' commitment to be a socially responsible company by taking care of "good conditions for suppliers, employees and the community" from bean to cup. It also states that it strives to limit its' environmental footprint, but "still have a way to go".

Regarding their packaging they:

- Have replaced the aluminum from the coffee capsules with a biocompostable material, from sugar cane and sugar beet.
- Have a 2030 goal to have all packaging from recycled or recyclable materials.

Having packaging made from recycled material is valuable, because in this way FLK supports the recycling industry and contributes to less waste and a more circular economy. Regarding recyclable packaging – it is a step forward in terms of sustainability; however, a very important step is to also ensure that the package is recycled. Unfortunately, a lot of the packaging in the coffee industry is recyclable, but the issue is that it does not end up being recycled. The term 100% made of recycled or recyclable materials would give much more insight, if there was some extra information, such as how much of the material is recycled and how much is recyclable. If it is from recycled materials, it is interesting to know the supplier of this material or what was the input.

In the Next Generation Coffee tab, one can read information about the project "Kaffe for en bedre fremtid" (in English: Coffee for a better future), which was later renamed as the Next Generation Coffee project. Here they educate the consumer on the problems of farmer's low pay and climate change affecting coffee cultivation. The project is aimed at providing coffee education for the farmers. It started in Othaya, Kenya, but has later expanded to Mbeya, Tanzania and Antiqua, Colombia. Each location has its' own product. During 2013-2016 over 5000 coffee farmers were trained in optimizing techniques in coffee growing, the average earnings of over 15000 have increased twice and the coffee yield has increased three times. The

project was not done by Peter Larsen alone, but together with Just Fair (charity organization) and Danida (agency of the Ministry of Foreign Affairs of Denmark).

There is a confusing detail here regarding 5000 farmers receiving education, but 15000 farmers having an improved profitability. There is no explanation regarding that, but one possibility could be the "word of mouth" effect. The trained farmers talked to neighboring farms about new techniques they have learned, and so the information was spread around the region.

In the Knus Kræft (in English: Crush Cancer) tab, one can read about PLK's initiative to help children with cancer, in partnership with KidsAid. Three million DKK were collected and have been invested in "positive and diversifying experiences" and in Room 1 in Skejby Hospital, which is a room designed for patients' leisure activities. There is a video which further presents the room and what it is used for.

In the last accountability tab — "From bean to biomass"- PLK talk about the importance of utilizing the biomass of the beans after they have been used. Currently 99% of the used coffee ends up in trash, when it can have further utilization. PLK say they have an ambition to eliminate waste regarding the coffee plant by 2030. They say they do not have a solution for that yet, but they are focused on moving towards this direction. This is valuable transparency information, because it is not something that has been done, but it is a target. Companies are usually cautious with setting targets like that, because there is the risk of not being able to achieve them. By being transparent with this strategy, the company is now held accountable by its' stakeholders, as well as it can be supported by the public that might have ideas on how this target can be achieved.

The other tabs focus on coffee inspiration, coffee products assortment and contacting PLK for further inquiries. They work with other businesses, by selling regular coffee, specialty coffee (part of the Peter Larsen Special line), coffee machines or renting their "coffee shop" service for parties/events.

PLK has released a Statusrapport (in English: progress report) in 2018. The report has 40 pages and includes insightful information about the internal situation at PLK, as well as its' efforts in improving its' supply chain.

A lot of the information is again aimed at educating the consumer on appreciating the coffee and on important issues in the coffee supply chain. The report starts with setting the scene on the importance of coffee, how both consumers and farmers depend on it, but how without radical changes it is expected that by 2050 half of the coffee production will be eradicated. PLK expects that by 2021 all of its' coffee will be certified. They say that they have had and will continue to maintain a focus on sustainable development and green innovation. To prove that, they provide the examples of the projects they initiated/been part of:

From Philanthropy to Business. Under the initiative of Dansk Industri (in English: Danish Industry) project, together with 20 other companies, PLK is working towards "translating UN's global goals into business opportunities".
 PKL has launched a number of new initiatives "in an attempt to find solutions that will secure the future of coffee and coffee farmers' living conditions".
 The Next Generation Coffee project is an example of that, where they state the same facts provided on the webpage.

Reports

- Coffee Helper. Together with the Danish Initiative for Ethical Trade, Rema 1000 and World's Best News, PLK launched an information campaign aimed at educating the public on the inequality between the sexes in the coffeeproducing countries.
- PLK has focused on food innovation, finding new applications for coffee not just as a drink, but in the food sector as well.

Next, one can find out some financial information. The net profits after tax in 2018 were 12.6 million kr. – a 50% increase compared to 2013, when they were 8.3 million kr. They explain the increase thanks to their investments that target long-term sustainability, which in the end turns out profitable not just for environment, development and conscience, but also for business profitability. PKL has been awarded the Made in Viborg Prize in 2018 by the Viborgegnes Erhvervsråd (in English: Viborgers' Business Council).

PLK presents the 4 values their company is based on: responsibility, passion, quality and innovation and a few descriptions of what they do in accordance to these values. There are no tangible facts that are provided in here yet.

Further, one can learn about the history and ownership of the company. PLK was opened in 1902, by Peter Larsen in Viborg. Today the company is managed managing director and co-owner Claus Bertelsen. The company has 66 full-time employees and 50 hourly-payed baristas distributed across Denmark. In 2004, Löfbergs Coffee Group, which is also a family owned business, have become part of the group of owners for PLK. Together with Löfbergs Coffee Group, PLK sells its' coffee in Denmark, Sweden, Norway, Finland, Estonia, Latvia, Lithuania, the United Kingdom, Canada and Ireland. PKL later states that 98% of its' revenue is from Denmark, Iceland, Greenland and the Faroe Islands. That indicates that the two groups have operations of their own, with no information on how the two interact. Löfbergs Coffee Group has a sustainability report of its' own and is a major player in Scandinavia. Similar to the case of Merrild and Lavazza, I don't look at Lavazza or Löfbergs Coffee Group, given the fact that they are groups that hold multiple other brands with different management teams and different business practices.

Further, PLK gives information on its' channels of distribution. Grocery stores sales are their largest business area. On the side, they also sell coffee to business clients, such as cafes, gas stations, hotels, as well as businesses that sell PLK coffee under other trademarks. PLK also sells their coffee at events.

As part of the "Philanthropy to Business" project, PLK state that they are "in the front row of sustainable transition" (page 16) and are "the forefront of the work on and implementation of the UN's 17 Sustainable Development Goals for 2030" (page 16). According to an analysis done by Straylight, Danish consumers view PLK as the most sustainable coffee brand on the market. Even though consumers' opinion is not necessarily an indicator of reality, PLK states that this comes with the responsibility to act accordingly. On PKL's priority list are goals number 2 (zero hunger), 8 (decent work and economic growth) and 12 (responsible consumption and production), with very high importance, followed by 4 (quality education), 5 (gender equality), 13 (climate action) and 15 (life on land) with high importance. The other goals are considered of moderate and low contribution from PKI. There is a lot

of information on why it is important to help achieve these goals, how they relate to the coffee industry and how PLK is committed to work towards them. The following are actual measures that have been implemented:

- The production taking place in Denmark is 100% renewable energy from wind turbines;
- The warming of the headquarters is done entirely with biogas;
- Next Generation Coffee project educates, trains for eco-friendly production and gives financial support for dealing with climate change through increasing the quality and amount of coffee beans. In Kenya, after two years of collaboration, the coffee yield has increased from 3 to 13 kilos of cherries per tree, the quality of the coffee has increased, as well did the wages and living conditions of farmers. The project is done with the help of International Coffee Partners.

As mentioned in the literature review, oversupply is one of the causes of such low prices payed to the coffee farmers, therefore increasing the amount of coffee beans contributes to the perpetuation of the oversupply problem. On the other hand, as PLK states, the coffee industry is under threat because of climate change and many areas that were suitable for coffee growing won't be suitable anymore, therefore increasing the supply of coffee is in a way protecting the future of being able to meet future demands. Also, having a more productive farm (more cherries per tree) is good in terms of needing less land for production.

- The Coffee Helper campaign aims at educating the Danish consumers, so that in the end they can make better decisions in regards to the coffee they buy.
- In 2018, 57.5% of the coffee sales were made by selling certified coffee, compared to 24.5% in 2017. The goal for 2021 is 100% certified coffee sales.
- 29.1% of PLK products is organic (Here it is not clear if it is the product range or the product sales). As a result of the organic replacement of regular production, there are given statistics for reduction of pesticides (23.850 kg) and fertilizers (236.010), conversion of land to organic production (2.114 football fields), amount of waste that is considered a non-toxic fertilizer (7.316.100 kg).
- Thanks to the Fair Trade certified sales in Denmark, during 1st of July 2017 and 30th of June 2018, the cooperatives received a premium of 3.420.080 kr and the increase in organic farming sales increased with 2.565.060 kr.
- PLK strives for 100% traceability and having as few intermediaries as
 possible. They buy a large portion of coffee from cooperatives, which have
 under their umbrella many small-scale farmers. The names of the
 cooperatives or any other current intermediaries are not displayed.
- PLK, similar to BKI, have a Code of Conduct, which serves as a guideline for suppliers and employees, regarding ethical, social and environmental issues.
 The Code of Conduct is not published.
- The coffee cherry has a high nutritional value and through coffee drinking, some professionals estimate that we only use 3-5% of this value. As a result, PLK say it is working with finding new ways of extracting this value from the

- plant by collaborating with researchers and other institutions. Besides that, PLK is experimenting with coffee as a fertilizer.
- Together with COWI A/S and other organizations, PLK is exploring the use of blockchain technology, with the purpose of "accelerating sustainability, transparency and traceability in bio-based value chains such as coffee" (page 30).
- PLK is part of the project run by the Danish Ministry of Environment and Food called "Danmark mod Madspild" (in English: Denmark against foodwaste). The roasting processes have zero (coffee) waste.
- PLK interacts with customers at events, workshops and festivals at the so-called "Peter Larsen Coffee Live". It then tries to talk to the customers to get insights in consumer trends, as well as give a chance to customers to get to talk to PLK. 16% of the revenues from PLK Live goes to charitable purposes.
 36% of the revenues from PLK Live go to the salaries of the employees.
- More information on the Knus Kræft (in English: Crush Cancer) is given.
- PLK supports the following football clubs: AGF, FC Midtjylland, Randers FC, Hobro IK, AaB, Silkeborg, Vejle Boldklub and FC Nordsjælland. It does so, as part of its' commitment to support the sports in Denmark. However, it is not clear what support is given.
- Regarding employee satisfaction, PLK published the survey: the questions, accompanied by the results. So far, this high level of transparency regarding employee satisfaction is high, in comparison to Merrild that doesn't have any information about its' employees and to BKI mentioning several things, but not providing evidence to it. The results were based on a 1 (lowest) to 5 (best) scale with all answers in the range of 3.49 and 4.8. It is questionable whether they would have published these numbers if they were lower, but the admirable thing is that they have achieved these numbers.
- It is said that the report has not been audited externally. The company is regularly audited by their certification agencies.

PLK also has a Kontrolrapport made by the Danish Veterinary and Food Administration.

Table 5. Analysis of Peter Larsen Kaffe.

Overall, PLK has showed higher levels of transparency compared to Merrild and BKI. It has also acknowledged several times the importance of transparency in the coffee industry. It is working on gaining consumer trust through their commitment to sustainable development and it is succeeding at that, judging by the results of the survey done by Straylight. PLK provides a large array of information, especially about the internal situation in the company, as well as their work with other organizations.

They talk a lot about the problems in the supply chain and why it is important to solve these problems, as well as provide certain numbers that give proof of commitment to sustainability. 100% certified organic coffee target, 100% fossil fuel free headquarters or 3 to 13 cherries per tree improvement after their training program are valuable numbers.

On the other hand, it can be seen that some of the given numbers are presented in the best possible way, to emphasize the company's efforts. For example, they show the total premium payed to cooperatives, thanks to certified sales, but do not indicate anything about the total payment of farmers (the price + premium, not just the premium).

Regarding supply chain transparency, they state they strive for 100% transparency, direct trade and few or no intermediaries. That is a remarkable step, but they do not give the names of any of their current suppliers or more financial information. We know with more or less precision where the coffee is sourced from, depending on the coffee line (most precision is with The Next Generation coffee line).

The Coffee Collective

The Coffee Collective is one of the most popular companies in the specialty coffee market. Founded in 2007 by its' three founders, The Coffee Collective is smaller than the previously analyzed companies. They sell their coffee online, through one-time purchases or through a subscription model; as well as through the four cafes they own. They also sell coffee to other cafes. The Coffee Collective brand was not found in any of the visited stores, given the fact that supermarkets are not a selling channel for the company. At the moment, the company offers a variety of eight products. The analyzed sources of information were the packages of The Coffee Collective products, the official website of The Coffee Collective, the 2020 Sustainability Report retrieved from the company's webpage and the official website of the Danish Veterinary and Food Administration. Further on, I will refer to The Coffee Collective as TCC.

COFFEE COLLECTIVE

Image source: Coffee Collective (n.d.)

The Coffee Collective

Package

Access to packaging was done by purchasing some of their products online and having the physical product available (so I can check if there's anything important on the back of the package), as well as looking at their website, where they display the variety of their coffee products. All products have a standard design that is easy to follow.

- Name of coffee;
- Weight;
- Contacts of the company: address.
- Descriptive qualities of the coffee;
- Certifications: European Organic;

- Land of origin: All products have the name of the country and town, for example: Taypiplaya Caranavi, Bolivia; Buku Guji, Ethiopia;
- Produced together with: the family or organization are given, for example:
 Family Rodriguez or METAD;
- Quality bonus: 274%; 400% and other numbers. There is no information on what the quality bonus means. This type of information was not found in other brands.
- Best before date;
- Roasting date.

Other brands have packaging date. It is not specified whether packaging date is the same date as roasting date.

- Link to the official webpage of TCC;
- No QR code provided.

When getting the coffee delivered, there is a 4A informative page that comes with the coffee. It contains some extra information on the quality of coffee and its' location. Its' purpose seems to be connecting the consumer to the origins of the specific coffee. The paper contains information on where the coffee is from and how the landscapes look like, the usage and benefits of any special processing methods, such as Coco Natural method, more details about the taste and a few words about the farmers.

Website

https://coffeecollective.dk/

The website is user-friendly, with four main tabs: shop, subscribe, learn, locate us. In the shop and subscribe tabs, once can do exactly as the name suggests. In the locate us tab, one can find the location and a few words about the four coffee bars owned by the TCC, as well as the location of the other partners from all over the world, which are other coffee bars that source coffee from TCC. This is good transparency regarding downstream operations. If one wants to check if a certain café sells TCC coffee, they can immediately check if that is the case by looking at the list of partners.

What is of most interest transparency-wise is contained in the learn tab. Besides finding inspiration for coffee-making, access to courses, brewing guides, one can read about the company itself, its' sustainability efforts and other stories.

Regarding the company, the following information is provided:

- TCC is run and fully owned by its three co-founders. They each have their own role in the company (head of marketing/sourcing/roastery);
- The foundation year: 2007;
- Besides the 3 founders, there are 11 employees;
- The barista group is diverse in terms of nationalities and it has several champions of coffee competitions;
- One of the core values is transparency. Coffee is traded directly from the farmers. TCC visits the farmers several times per year;
- There are a several technical details regarding the roasting, such as rinsing every bag of roasted coffee with nitrogen to preserve the high quality or the kinds of quality checks they do on the roasted batches. Even more so, every first Friday of the month, TCC offers a guided tour and coffee tasting in their

roastery. This type of easy access inside the roasting facilities is probably the best way to provide transparency at the roasting level to the consumers. Regarding sustainability TCC states that:

- It has become a B corp certified company. This means that part of TCC's purpose now is "to have a positive impact on our society and the environment in general" and that the company is legally binding to take into consideration how their decisions affect the employees, suppliers, communities and the environment both locally and globally. They describe in more detail why and how they became B Corp certified.
- There is a link to the Sustainability Report 2020 that is analyzed further in this table.
- TCC only does direct trade and it is working with transparency as a tool to lift prices paid to farmers. The transparency steps that they take are producer facts (the one seen on the packaging), consumer facts to producers, financial transparency online and financial transparency to consumers and to the farmers. The way they ensure this transparency is by making regular visits to the farms and sharing information on how they sell their coffee and what the customers think about it, they publish a Transparency Table in The Sustainability Report showing all financial information regarding coffee purchases.
- They find it easy to communicate financial information to the farmers, but have not found yet how to do so in an engaging way with consumers.

That is an indication that consumers do not show much interest in financial information regarding payments in the coffee industry.

 As a fight against the low payment of farmers, TCC pays the farmers a Quality Bonus, which can be found on the packaging. It is a number that represents by how much more is the price payed to farmers, compared to the average market place. TCC states that they don't believe that the Quality Bonus is "the final answer to the price crises", but they do hope that it will engage the consumers and get them interested in the importance of transparency in the coffee industry.

Reports

As mentioned on the website, TCC has a Sustainability Report for 2020. It is the 3rd Sustainability Report and it contains 26 pages. Here, on can expand on the knowledge that was given on the website and learn that:

- The average Quality Bonus has increased from 203% in 2017, to 233% in 2018 and to 245% in 2019.
- The total amount payed to farmers in 2019 was 6.863.957 kr, out of which 4.876.281 were thanks to the Quality Bonus.
- TCC set a target for zero emissions by 2022 regarding its operations. Here
 they add on the importance of doing so. Climate change is affecting farmers
 by lowering their yields, due to pests, extreme temperatures and weather
 patterns.
- TCC collaborated with Daterra and their farm in Brasil. They have designed a system with nine cultivation variables (nine rules regarding cultivation of

- coffee trees and their surroundings) and have implemented it on the farm. The result now is organic coffee, that supports local biodiversity, soil health and has a unique taste profile.
- TCC signed the "Transparency Pledge" together with several other roasteries from all over the world. The pledge is a common code for transparency reporting in green coffee buying (transparency.coffee, 2020). It gives a list of cost, quality, volume and environment related information that are expected to be publicly available by the signing parties (transparency.coffee, 2020). TCC follows this code from which one can find very detailed information.

In the images below this table, one can see these indicators. So far, this is the most detailed and valuable information to be seen published by a company. One can see the list of all 19 suppliers of coffee and their locations. For each of them there is indicated the number of years (shows the commitment and long-term focus of the business partnerships), the quantity, the return to origin (price payed by TCC to the supplier, which can be a cooperative or the farmer), the return to farmer (which can be the same or a bit lower than the return to origin, due to cooperatives fees), market price (which is given for comparison), recognized certifications (Rainforest Alliance or Organic) and a SCA Quality Score (Very Good, Excellent, Outstanding). One can see that the prices are given according to the quality score. The Outstanding rated coffees received a return to origin above 4.8 USD/lb (14.90 DKK/kg). This information is highly relevant when discussing farmers' economic incentive to continue coffee farming. Displaying the price payed to the farmer is the best proof of a company to show their consumers the efforts done towards solving this issue.

Further there are coffee purchase and sales indicators, such as total coffee purchased, total roasted coffee sold, percentage of direct trade coffee (100% in 2019), percentage of Organic certified coffee (25.3% in 2019) and the weighted average of the return to origin prices (4.41 in 2019). The numbers are given for the last 4 years, so one can see where certain trends are going.

The following table contains human resources indicators (for the past 4 years), such as number of full-time union employees, number of nationalities, percentage of female employees and a percentage comparing the salaries of female "white collar" positions and female barista positions. These indicators show the internal situation, in terms of diversity and fair remuneration at TCC.

Further, there are the given the environmental indicators for the last 4 years at all 5 locations operated by TCC (4 cafes and one warehouse). These include the electricity, water and heat usage.

The Coffee Collective also has a Kontrolrapport made by the Danish Veterinary and Food Administration.

Table 6. Analysis of The Coffee Collective

	Relationship (years)	Quantity bought (kg)	Return to Origin (USD/Ib FOB)		Producer price (USD/Ib)	Recognized Certifications	SCA Quality Score
FVH, Huehuetenango, Guatemala	13	11.640	4,21	1,19	Same as FOB		Excellent

Image source: Coffee Collective Sustainability Report (2020)

Compared to all the other analyzed companies, The Coffee Collective is the most transparent in regards to everything: the product itself, the internal situation in the company, as well as its' supply chain. They provide very clear indicators to support their statements. They are also very open about using transparency in their business practices. The other companies also mention the importance of transparency, but obviosuly don't go as far as TCC. The company offers the most comprehensive overview on financial, human resources and environmental indicators. By providing so much information, it feels like the company is not afraid to be held accountable, which is a good way to ensure consumer trust.

The Transparency Pledge is a great tool in providing a common standard for all roasteries that want to be be transparent regarding their green coffee bean purchases. The existance of this code is a step forward for gaining more transparency in the payment of farmers, which is at the core for sustainable development of the coffee industry.

In terms of quality, every package of beans has the Quality Bonus, which is payed according to the SCA Quality Score. Therefore, the Quality Bonus is an indication of both the price payed to farmers, as well as the quality. The score is based on SCA's cupping protocol, which allows experts to classify the coffee ino 4 quality categories. The score received is the best measure to back up quality statement.

Regarding supply chain transparency, TCC's coffee is 100% Direct Trade, meaning no intermediaries. They display the name of all suppliers and other variables that provide a picture of the business interactions between TCC and the farmers/cooperatives. The transparency effort done by TCC sets an example for the rest of the companies that choose to pursue transparency as part of their strategy.

DISCUSSION

The purpose of this research is to answer the following research questions:

What is the level of transparency that Danish coffee sellers offer their customers? What is the reasoning behind having this level of transparency?

There is no framework one could refer to, that allows us to categorize companies into for example, a low, medium or high level of transparency. The level of transparency can be judged with a relative eye and depending on who analyzes a company, they might have slightly different opinions. As it was discussed in the literature review, there are many areas (environmental footprint, suppliers, workers etc.) that transparency covers. The best understanding of level of transparency is by looking at it from different angles.

After analyzing the four Danish coffee sellers, I will discuss the *level of transparency* in three ways. First, from personal observation, I will categorize the transparency based on the perspective that a customer can take: product, company or supply chain perspective. Second, I will assess whether Sodhi's et al. (2019) six types of *product and supply chain information* were disclosed by the coffee companies. Lastly, based on Ponte's (2002) representation of the coffee supply chain, I will indicate at which links was most of the information available.

Depending on the perspective one takes, transparency could be with respect to the product, to the company or to the supply chain. Figuratively speaking, if we look closely, we only see the product. If we step back, we see the entire supply chain. The further we advance from product, to company, to supply chain, the bigger the view gets and the more one can understand how the product came to be as it is. Products depend on the company and the company depends on the supply chain. The supply chain is also driven by the nature of the product, as well as the company. For example, the fact that coffee is best consumed a few weeks after roasting, makes it so that the roasters will be close to the final customers, in the global North. The fact that coffee grows in the global South makes it so that the farmers are also in that region. In this way, coffee as a product shapes the supply chain of coffee. A company can also shape the supply chain to some extent. We have the example of The Coffee Collective or any other company that does direct trade. They exclude all intermediaries, in this way shortening the supply chain.

The products, the company and the supply chain are highly inter-linked. Nonetheless, when analyzing the companies, I observed the that most information can be classified into one of the three. Usually *product* information would be on the packaging, *company* information would be on

the company's website or in company's reports; and *supply chain* information would be found (to a limited extent) on the company's website and (mostly) in companies' reports. If the consumer doesn't give much interest towards their purchasing decision, they will only know what is displayed on the packaging, which is not much. If the consumer invests more effort into their search to document their purchasing decision, then they will find out more about the company first and then about its' supply chain. The more informed a consumer is, the more ethical their purchase can be.

In the table below, I present the indicators one can find to base their coffee purchasing decision on solely on what information is provided by the Danish coffee sellers. Depending on the number and type of indicators in a category, there is a higher or lower level of transparency.

	Indicators that offer transparency
Product	Volume: weight; Safety: best before date, packaging date, roasting date; Quality: type of coffee, type of bean, strength of roast, land of production, land of origin, descriptive qualities, SCA score/Quality Bonus.
Company	Contacts of the company; history of the company; company values; financial numbers on sales/profits etc.; procedures regarding roasting, packaging, manufacturing, safety compliance or quality assurance; energy usage/CO2 footprint; volumes of sales; ownership; acquisitions; number of employees; employee satisfaction; strategies/commitment towards a goal (example: PLK focus on utilizing more of the coffee bean than the 3-5% that is being utilized now and many others); commitment towards the SDGs or other standards, such as the Transparency Pledge; projects that are either financial or educational, aimed at either the local community (PLK's Knus Kræft or Coffee Helper, Merrild's school reward competition) or back to the farmers (Lavazza and Merrild's "¡Tierra!, PLK's Next Generation Coffee).
Supply chain	Partners (other coffee sellers, NGOs, ministries and only in TCC's case and partially in PLK's case – actual suppliers of coffee); channels for sales; supplier management (BKI's Code of Conduct), payment of farmers (only in TCC's case and partially in PKL's case), certifications (European Organic, Danish Organic, UTZ Certified, Rainforest Alliance, Fair Trade, ISO 9001, HACCP, IFS and B corp)

Table 7. Analysis of transparency, categorized by product, company and supply chain.

Some of the indicators could be classified in more than one category. For example, land of origin will say something about the quality of the product, in terms of what flavors to expect in the coffee, but it will also reveal where the other end of the supply chain is. Similarly, certifications will indicate the quality of the product, the company's commitment to sustainability/transparency, as well as that certain practices are taking place along the supply chain. For example, European Organic certification informs the consumer that the product is organic, that the company is

striving to be better in terms of sustainability and that the farmers don't use pesticides and herbicides for the growth of coffee trees.

As one would expect, since most of the information is collected from what is published by a company, most of the information is regarding the company itself. Each of these indicators allow a consumer to know better what they are buying and what company and supply chain they are supporting.

Regarding the six types of supply chain transparency information as presented by Sodhi et al. (2019), the coffee roasters had different degrees of transparency.

Type of transparency	Degree
1. Supply chain (suppliers at all tires)	Only TCC has information of its' suppliers at all tiers. We know TCC's suppliers of coffee, as well as all their channels for sales and any other partners. Such kind of disclosure was facilitated by the short supply chain that comes with doing direct trade. All companies were transparent regarding ownership.
 Supplier base (Tier suppliers only) 	Merrild, BKI and PKI haven't indicated who their suppliers are, even the most immediate ones from which they buy the coffee. The companies indicated the name of organizations they collaborate with, but these are not companies that supply the coffee.
3. Supply chain environmental footprint	TCC is transparent on its' own facilities' energy, heat and water usage. PLK is transparent in regards to the no fossil fuels production and warming of their headquarters and BKI gives numbers for their CO2 emissions for the last 10 years. However, these are all indicators regarding environmental footprint of the company, not the supply chain. Collecting information on the whole supply chain would take considerably more effort.
4. Supply chain cost information	TCC is the only company transparent about the price they pay to their suppliers. PLK is selectively transparent about the premium payed thanks to certified coffee sales.
5. Supplier workplace safety compliance	BKI is transparent about the Code of Conduct they have with their suppliers. PLK says it works in accordance to a similar Code, but do not publish it. From an internal perspective, PLK provides the employee satisfaction survey and scores received. BKI states it holds annual surveys every year, but does not publish the survey or the scores.
6. Assuring provenance	All companies have (for most of their products) information on land of production and land of origin. Again, the information varies in terms of precision. Some packages specify that the coffee is a blend of beans from South America, Central America and East Africa and some specify the exact farm and location from which the beans come from. TCC was fully transparent about the provenance of the beans.

In the food and beverages sector assuring provenance is done to prove to the customer that the food has desirable qualities, but mostly that it is safe. In that regard, all companies had the Kontrolrapport made by the Danish Veterinary and Food Administration.

Table 8. Analysis of transparency according supply chain transparency information as presented by Sodhi et al. (2019).

By reading the above table, one can get an overview on what areas are Danish coffee sellers more or less transparent about. Companies were more transparent at the company level and did not go upstream un the supply chain (besides TCC). The companies were selective in the way they present their statistics, since mostly good numbers were presented. An example of a "bad" number was BKI's CO2 emissions. In 2018 they have emitted 1804 tons of CO2. However, the number is presented along the last 10 years' emission, which shows a decrease in 2018— a fact BKI takes pride in.

Lastly, I will look at the entire supply chain representation provided by Ponte (2002) and discuss at what nodes in the supply chain I encountered most transparency. The more information I have on a specific node, the thicker the red line under the node representation.

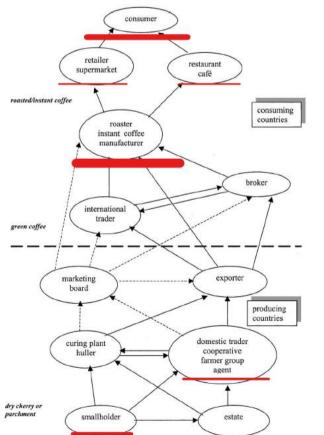


Figure 7: Supply chain of coffee; Source: Ponte (2002), red lines are edited.

Roaster, instant coffee manufacturer. Since I analyzed the Danish coffee sellers, which are the companies that roast or manufacture the instant coffee, most of the transparency was at their company level. We get to know about the internal situation in the company in terms of several indicators. For the exact indicators, refer to Table 7.

Retailer, supermarket, restaurant, café. The companies offer some information on what their channels for sale are, but not 100% full disclosure, besides TCC which has full disclosure on their own cafes, their partner cafes and single-time/subscription-based purchasing. PLK displays the names of some of its' business customers. For the rest of the companies we know that they sell to regular consumers in supermarkets, as well as to other business partners, but the names are not disclosed. Obviously, we know that they sell in Føtex, Lidl and Netto, because these were the chosen stores for initial selection of the coffee brands. But we know that from personal observation rather than from companies' choice to publish this information. We do not know the volume of coffee which is sold through each of the channels.

Consumers. Judging from companies' way of interacting with their consumers, one can build a relative picture of the coffee consumer. First, companies focus a lot on how important it is to deliver the high-quality coffee to their consumers, in this way creating the image of the consumer looking for great quality. The numbers state otherwise, since 80-90% of the coffee sold on the world market is classified as mainstream quality (International Trade Center, 2011). On the other hand, the Danish market has higher expectations of quality compared to the rest of the world, proven by the rising trend in specialty and certified coffee (CBI, 2020). What level of quality is expected by the Danish coffee consumers could be a study of its' own, but for now it looks like the consumers seek quality.

The other aspect one can learn about consumers is that there is not enough knowledge about the problems in the coffee industry. TCC and PLK both discuss this issue and state the importance of educating the consumers, so that they can make better purchasing decisions. PLK has the Coffee Helper campaign, as well as other projects, aimed at educating consumers. TCC mention that they "have yet to fully succeed in engaging the consumers in the importance of transparency in the coffee market" and that they believe that "only a few coffee consumers know about the current price crisis facing the coffee farmers" (Dupont, 2019). There is no information regarding numbers of consumers.

Smallholder (farmers), cooperative, farmer group. In their reports and websites, the companies have brought up several times information about farmers. The talk evolved around the necessity of paying a higher price to farmers, as well as supporting farmers with trainings. PLK provided

information on its' projects that are aimed to help farmers or farmer cooperatives. Some companies provided information about the practices at the farming level, such as hand-picking (Merrild) or Cocoa Natural processing method (TCC). TCC published the numbers on how much they pay the cooperatives and how much of that is received by the farmers. Information in regards to the location of the farmer, which means the land of origin was provided by most companies with more or less precision.

All actors in between. Besides BKI's Code of Conduct or PLK's reference to a Code of Conduct, which indicate commitment to ethical supplier management, there is no information about suppliers. There are no names or numbers even regarding most immediate suppliers. Again, TCC is the only exception thanks to direct trade and no intermediaries.

TCC and PLK acknowledge the importance of transparency, because they recognize the problems in the supply chain of coffee. The biggest problem they refer to is the *lack of economic incentive for farmers* to continue their farming, which endangers the future of the coffee farming, as well as their business in the future. That seems to be the main driving force for transparency. They also refer to other problems in the coffee industry: effect of climate change on coffee farming, soil erosion, biodiversity loss and at the farmer level: poverty, limited resources to education and gender inequality.

The collected data doesn't reveal *the reasoning behind the level of transparency* these companies chose. For genuine answers to this question, one would have to interview the management or be part of the management of a coffee seller. Therefore, I am not able to confirm or contradict whether the coffee sellers strategically chose their level of transparency according to any of Sodhi's et. al. (2019) suggested benefits and risks of transparent supply chains. Based on observation, I would argue that all the analyzed companies use their transparency *to gain consumers' and investors' trust*.

Another issue on which the data doesn't reveal any information is *traceability*. It would be valuable to know how much information is collected by the roasters about their suppliers, or even about their own company. In case the companies actually have some data on their supply chain, but choose not to publish it would be an interesting issue to discuss. Unfortunately, access to this type of information is hard to get.

The results of this study show that the Danish coffee sellers differ from one to another in regards to the level of transparency they adhere to. Merrild Kaffe was the least transparent company. That can partially be explained by the fact that Lavazza, its' parent company takes responsibility of the CSR reporting on the group level. BKI was more transparent – they provide numbers on CO2

emissions, as well as other efforts in being more environmentally-friendly. They also have their Code of Conduct available for the public. Peter Larsen is part of multiple projects it does together with other organizations and it does a good job in presenting these projects to the public. It links its' activity with the Sustainable Development Goals. The company provides some numbers on payment of farmers, percentage of certified coffee, increase in coffee yields etc. They are very transparent on employee satisfaction. The Coffee Collective was the most transparent company. The most valuable data they provide is the list of all their suppliers, the payment of farmers and the SCA score. The company also offers social and environmental indicators, as well as projects they are part of. They set an example of how a company can strategically implement transparency.

All four companies were transparent regarding basic product information. All companies have a share of their products certified. PLK and TCC give the percentage of certified coffee, as well as targets for the future, while Merrild and BKI do not. All companies were transparent in regards to ownership, company values and company's history. This doesn't come as a surprise, since most companies will benefit from creating a brand image in the eyes of customers, while they don't need to put effort into collecting this information, since it is already available. It is more difficult to be transparent on other issues, such as Sodhi's et al. (2019) six types of transparency information.

CONCLUSION

In this research, I have analyzed from three different perspectives the level of transparency that Danish coffee sellers offer to their customers. In order for me to do that, I have gathered information from sources that companies use to communicate with their customers: the product packaging, the official website of the company and other available and relevant reports.

The companies that were analyzed: Merrild Kaffe, BKI foods, Peter Larsen Kaffe and The Coffee Collective have a strong presence on the coffee market in Denmark. They account for a small share of the entire Danish coffee market, loosely representing the rest of the market. However, due to the small sample size of this research, generalizations about transparency for the rest of the Danish coffee market should be taken with precaution.

The main findings of the study are:

- Transparency was found to be on the product level, the company level and the supply chain level. On each level, I have provided examples of indicators that provide relevant information. For reference, check table 7. The information selected was according to indicators that are relevant for the coffee industry.
- 2. There were examples found on all six types of supply chain information presented by Sodhi et al. (2019). For some of the coffee supply chains we are able to see who the suppliers are, some of the costs, many examples of provenance, environmental measurements and targets of the company (not its' supply chain), and codes of conduct or employee satisfaction surveys that show workplace satisfaction and safety compliance. Each company fitted differently according to this categorization. For example, BKI was transparent in regards to supplier management, by publishing its' Code of Conduct, that being its' "transparency strength". In contrast, it was not nearly as good as The Coffee Collective in cost transparency. I can conclude that the companies have covered in different depths these transparency areas, with each of them having more or less transparency strengths.
- 3. Looking at the whole coffee supply chain, the companies provided most of the information on their own internal activities, with very limited information on the rest of the supply chain. I was able to collect some information on farmers, farmers' cooperatives, selling channels and customers. There was no information found about international traders or their suppliers. This is not a satisfactory finding for the ones hoping for a higher degree of

transparency. The reason for why there is no information provided by coffee roasters on international traders and other middle agents should be further researched.

As discussed in the literature review, lack of economic incentive of farmers is the most important issue in the coffee market. That was also recognized by some of the companies, which have dealt with the issue in different ways. Peter Larsen is leading several projects that are aimed at improving profitability of farmers, as well as pay them a bonus for the certified coffee. The Coffee Collective pays farmers a price high above the market price. They publish the information and discuss the importance of transparency, especially with the purpose of solving the price crisis they refer to. They have signed a transparency pledge, which offers a standard guideline for the kind of information that should be published by the coffee roasters. To conclude, there were varying levels of transparency on the farmer level.

There was no discussion from none of the companies regarding the oversupply of coffee, the high concentration of roasters or the symbolic vs. intrinsic quality of the coffee. I was not able to find an answer to what is the reasoning behind the current level of transparency. Peter Larsen Kaffe and The Coffee Collective are the more transparent companies. They also acknowledge the current problems and present them to the customers. The seem to genuinely want to do their fair share of good and help solve the issue. In this way, they gain trust from consumers and investors, which I believe is their main motivation to be transparent. A different research methodology is required to be able to identify companies' reasoning for their choice of transparency strategy.

The research is meaningful, because it expands the knowledge on the coffee industry. It gives an overview in what aspects the companies are doing better and where there is room for improvement. It acknowledges the importance of transparency and its' power to drive positive change in the industry. As discussed in the literature review, some changes are necessary, due to social and environmental pressures.

FURTHER RESEARCH

The methodology of this study limits its' generalizability. To improve on the current results or further expand knowledge on this subject, one could:

- Look at more sources through which companies are transparent, such as social media accounts, review websites etc.;
- Interview the companies, for a more in-depth perspective from the roasters side;
- Take the perspective of other actors in the supply chain;
- Analyze in more depth certification companies, since they usually have an overview of the whole supply chain;
- Analyze consumers and whether their ethical values translate into their purchasing behaviour. Analyze what is needed to engage consumers in solving the issues in the coffee supply chains;
- Gather quantitative data, such as what is the percentage of certified coffee and whether that is related to other variables;
- Analyze the role of the International Coffee Organization and other organizations with a similar power on affecting the business practices along the supply chain, as well as the transparency in the industry;
- Expand on technology that allows for traceability and its' potential to improve efficiency, costs and ensure that all actors in the supply chain are fairly rewarded for their work;
- Analyze the relationship between transparency and financial success of companies;
- Look at differences and similarities between the specialty coffee market and the mainstream coffee market.

PERSONAL NOTES

The writing of my master's thesis was a considerable growth opportunity for me as a researcher. Firstly, I have trained my skills in collecting, analyzing and presenting information in a way that is clear and meaningful for others to read. Secondly, I have learned a lot about coffee, the coffee supply chain, the level of Danish roasters' transparency and the "black holes" where there is not enough transparency. The research has ignited my curiosity to further expand my knowledge on the subject.

I want to offer special thanks to my family and friends that have supported me throughout this journey. I also want to thank my supervisor, Andrew Crabtree, who has guided me and showed me different ways I could improve. Even though I know that the work is not perfect, I am grateful for the process and for what I have been able to learn along the way.

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