Sustainability standards in the coffee chain

The impact on governance structure and upgrading possibilities

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Preface

Summary

In this thesis the impact of Fair Trade, Starbucks CAFÉ Practices, the Common Code for the Coffee Community (4C) and UTZ Certified on the governance structure and the upgrading possibilities of the coffee chain has been reviewed. These four sustainability standards are organised differently. Fair Trade, 4C and UTZ are voluntary standards, set by NGO's or industry associations, where CAFÉ Practices is a private standard, set by Starbucks. The main goal of the sustainability standards is to improve the social, economic and environmental conditions of coffee production. Fair Trade does this by providing a minimum price, a price premium, training, bringing social rights and decreasing the environmental impact of production. CAFÉ Practices also provides support, social rights, higher prices and additionally economic transparency and full traceability. 4C takes a different approach towards a sustainable coffee chain by setting the standard with a large amount of multi-stakeholder input. Its focus is on bringing social rights, providing access to market data and bringing traceability systems. Additionally, 4C tends to conserve biodiversity and decrease the environmental impact of the coffee production. Like CAFÉ Practices and 4C, UTZ Certified also provides full traceability, social rights and training to become good business men.

      The impact of the standards on the economic and social conditions of the farmers has been reviewed with the help of literature studies containing empirical studies from Bacon, (2005), Arnould et al., (2009), Jena et al., (2012), and others. From these studies it became clear that Fair Trade certified cooperatives on average receive higher and more stable prices than conventional coffee farmers. However, farmers tend to sell up to 60 per cent of their coffee through conventional channels, resulting in smaller economic gains. Furthermore, the studies showed that Fair Trade farmers had higher health indexes and higher levels of education compared to conventional farmers. It should be noted that some cooperatives have fared better than others, which is mainly due to the difference in technical, financial and human capacities. From general studies on all standards, it became clear that certified farmers have slightly higher incomes, are healthier and have more access to social rights than conventional farmers. Additionally, certified farmers reduced the environmental impact of production. Overall, it can be concluded that compliance with one of the sustainability standards can create upgrading possibilities for the farmers.

      Although sustainability standards can bring benefits to the farmers, power relations remain the same since the coffee chain remains buyer-driven. However, sustainability standards do create a shift in governance structure away from the market form of the conventional coffee chain. This is caused by the increase of the complexity of information involved in a transaction, since more information about quality and production methods have to be transmitted. Moreover, standards have a strong ability to codify this complex information. Furthermore, standards increase the capabilities of the farmers. Finally, the degree of control exerted by the standards on the farmers increases compared to the conventional chain. All standards use third-party certification, which means there are high levels of explicit control. CAFÉ Practices increases the level of control even further, since Starbucks buys all its coffee produced under the CAFÉ label. Farmers certified at Fair Trade, UTZ Certified and 4C on the other hand experience lower levels of control, as they can sell their coffee to multiple roasters. These farmers and buyers can be easily linked and de-linked. Overall, CAFÉ Practices can be seen as making a shift towards captive value chains, where Fair Trade and UTZ Certified shift towards a modular and relational value chain and where 4C shifts towards a modular value chain.

      To conclude, sustainability standards can lead to upgrading possibilities which can cause changes in the governance structure, as farmers become more empowered. Moreover, this governance structure also influences farmers' upgrading possibilities, because when the lead firm exerts high levels of control, the empowerment of farmers is limited.

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Introduction

The world market share of sustainable coffee has grown rapidly in the past few years. In 2010, about 16 per cent of global production was certified or verified as sustainable coffee (Coffee Barometer, 2012). In the last decade there has been an increase in the interest of the socio-economic state of farmers in developing countries, in the health and safety of food and in the scientific recognition that expansion of the agricultural production is regarded as being the greatest threat to biodiversity (Coffee Barometer, 2012). The increased interest of society in these topics has made several agricultural sustainability initiatives more popular. As a result, sustainability standards have enjoyed greater attention and a fast-growing market value (Giovannuccia and Ponte, 2005). Nowadays, small-scale coffee farmers are increasingly subject to different types of sustainability standards that offer specific conditions for their market inclusion. Many different sustainability standards have emerged, all with a different approach towards a sustainable coffee sector. For example, the Fair Trade standard aims to provide a good price for the coffee farmers, whereas the Rainforest Alliance standard mainly focuses on the impact of coffee production on the environment. The rapid increase of all these different sustainability standards raises questions regarding their impact on farmers' welfare and their role in the upgrading of value chains (Ruben and Zuniga, 2011). Furthermore, sustainability standards can affect the governance structure of the value chain, which is important for their effectiveness. Since the governance structure of the chain refers to the power distribution in the chain, it determines how resources and economic gains are allocated within the chain. Sustainability standards could impact the governance structure, as they try to empower the farmers. It is thus important to examine the influence of such sustainability standards on the governance structure.

This BSc thesis has tried to gain insight on the impacts different standards have on the governance structure and upgrading possibilities of the coffee value chain. First, the concepts of standards, sustainability, governance structure and upgrading will be explained. After this conceptualisation, the goal and focus of this research will be further elaborated.

Standards

Standards can be set up to specify technical characteristics of a product, specific processing and production methods, quality traits and safety issues. Increasingly, they include sustainability and ethical trade specifications relating to environmental impact, animal welfare concerns and worker conditions (Ponte, 2004). Standards reduce monitoring costs for buyers and enable suppliers to demonstrate their skills and standards of production (Muradian and Pelupessy, 2005). However, the reduction of transaction costs along the supply chain is not the only aim of standards. Standards are increasingly serving as strategic tools for companies in terms of market penetration, system coordination, quality and safety assurance, brand complementing and product niche definition (Reardon et al., 2001). In short, standards are used to differentiate the supply chain from that of competitors. Additionally, they are used to ensure the quality of the product and to address sustainability issues.

Basically, there are two forms of standards, namely mandatory and voluntary. Standards can be mandatory in a legal sense or voluntary, such that potential users are free to decide whether or not to comply. Standards can also be required in practice due to the large proportion of buyers that requires them. Mandatory standards are generally the preserve of public institutions, whereas voluntary standards can be the preserve of both public and private institutions (Henson, 2008).

In this BSc thesis, a distinction has been made between public, private and voluntary standards. Public standards are, as stated before, mandatory and set by governments in the form of regulation. Public standards often contain technical requirements and labelling procedures and provide a mechanism through which governments can regulate the food system (Henson and Reardon, 2005). Private standards are set by individual companies like Starbucks, Sara Lee and Kraft and focus on the improvement of production and processing methods to enhance input efficiency and quality upgrading (Ruben and Zuniga, 2011). Voluntary standards arise from a process in which

key participants in an industry or sector seek consensus. Voluntary standards may be introduced as a response to consumer requests, or as a result of initiatives led by NGOs or industry associations (Giovannuccia and Ponte, 2005).

Sustainability

The concept of sustainability in agriculture usually refers to aspects such as economic viability for farmers, environmental conservation and social responsibility (Giovannuccia and Ponte, 2005). All definitions of sustainability or sustainable development involve the simultaneous pursuit of these people, planet, profit concepts. Companies aiming for sustainability need to perform not against a single, financial bottom line but against the triple bottom line (Yakovleva et al., 2012). The triple bottom line implies that companies need to consider the social, environmental and economic impact of their decisions. As stated before, these sustainability issues are increasingly included in standards. Numerous sustainability standards arise, since public attention, consumer concern and the globalisation of supply chains create collective dilemmas for firms. Companies, non-governmental organisations (NGOs) and civil society organisations each develop sustainability standards to respond to these problems in their own way.

Governance structure of the value chain

As stated before, the sustainability standards can focus on different stages in the value chain and thus have different influences on the governance structure of the value chain. A supply chain includes a network of connected and interdependent organizations mutually and cooperatively working together to control, manage and improve the flow of materials and information from suppliers to end users (Fawcett et al., 2007). An important property of the value chain is its governance structure, which to a great extent determines how resources and gains are allocated within the chain. The governance structure of a chain refers to the extent to which the leading actors exert control over information exchange and production activities, and are therefore able to shape the functional division of labour along the chain and to set entry barriers (Gereffi, 1994). This is a mechanism through which economic profits may be concentrated in particular segments of the supply chain.

Regulatory systems, such as standards and certification schemes, can cause changes in the governance structure of the value chain. Above all, sustainability standards can cause changes in power structures and the distribution of income (Kaplinsky, 2000). As sustainability standards focus on empowering the farmers and giving them fair prices, these standards try to change the governance structure in such a way that it benefits the farmers. Since all the sustainability standards have a different approach towards sustainability (i.e. focus on empowerment of the farmers or on reduction of environmental pollution), the governance structure of the chain could be affected differently with each standard.

Upgrading

The adoption of standards by small-scale farmers can have two potential benefits: (i) it increases the ability to reap economic rent and (ii) it improves the chances of gaining access to, or remaining in, a particular market (Muradian and Pelupessy, 2005). The first involves an enhanced position in the chain and value-adding activities. The second involves outperforming competitors and avoiding exclusion, which does not necessarily imply larger bargaining power or value-adding activities. The focus of this research was on the effect that standards have on the ability of farmers to upgrade. Upgrading refers to making products more efficiently, and increasing value adding activities by making more sophisticated products and implementing more sophisticated processes (Humphrey and Schmitz, 2000).

In the case of sustainability standards, upgrading refers to optimisation of the production process and product (Van Dijk and Trienekens, 2012). Optimisation of the production process includes working more efficient and reducing the environmental impact of production. Product upgrading refers to quality and composition aspects of the coffee, but also to process characteristics such as fair trade, health and safety. Upgrading in this way relates to all elements of sustainability.

Aim of this research

As indicated above, there are many different sustainability standards for the production of coffee, (i.e. private, public and voluntary standards). These standards all have their own approach towards a more sustainable coffee market and therefore focus on different aspects. In their implementation, standards affect the livelihood of farmers involved, since their farm practices change through implementation of sustainability standards. Furthermore, standards also affect the governance structure of the value chain, as some actors may gain more power. This BSc thesis therefore has assessed the impact of sustainability standards on the upgrading possibilities of farmers and the governance structure of the value chain. This research has tried to gain insight on the differences between the public, private and voluntary standards and their different impacts on the governance structure and upgrading possibilities of the coffee value chain.

Since there are many different types of sustainability standards, first it has been reviewed what sustainability standards are frequently used and can be regarded as being key standards. A distinction has been made between voluntary, private and public standards. Second, the focus and goals of these key standards are elaborated. Since sustainability standards include one or more aspects of the well-known people, planet and profit principle, it has been reviewed on which of these aspects the different standards predominantly focus on. Third, it has been examined whether compliance with standards by small-scale coffee farmers improves their economic, environmental and social situation. Most of the time this should of course be the goal of a standard. Therefore it has been reviewed to what degree small-scale farmers have benefited from adopting a standard. For answering this question, literature with case studies providing empirical evidence on the impact of the different standards have been reviewed.

Finally, the effect of sustainability standards on the governance structure of the value chain has been assessed. First, it will be addressed how standards can affect the governance structure. Second, it will be assessed how the key sustainability standards change the governance structure of the coffee chain.

To summarise, the main question of this BSc thesis is: 'How do sustainability standards affect the governance structure and upgrading of the coffee value chain?' As explained above, this question will be answered through the following sub questions:

- What key standards are currently used in the coffee value chain?
- What is the main focus and goals of these standards?
- Does compliance with a sustainability standard improve the economic, environmental and social situation of small-scale farmers?
- How do sustainability standards affect the governance structure of the value chain?

This thesis provides a literature research and all questions will be answered on the basis of the literature found. The literature was found using the global search engine of the Wageningen UR digital library. An overview of the most relevant journals has been made, in order to be able to search efficiently. Additionally, the references of relevant studies also provided useful information on which articles to use.

Key sustainability standards

This chapter will review what key standards are currently often used in the coffee sector. The most often used standards are probably also the largest and most influencing standards. Therefore, this thesis will only focus on these key standards in the coffee chain. The coffee supply chain is a global value chain that spans geographic boundaries and deals with national and regional systems of regulation. For example, coffee roasters in Western countries are restricted to sophisticated institutional regulations within their home countries, but they do business with traders and suppliers who are mostly located in markets with less strict institutional regulations, especially when it comes to protection of environments and labour conditions (Manning et al., 2012). Powerful buyers have exploited this gap between regulatory systems by using cheap labour and natural resources in those little regulated environments to gain margins from highly dependent suppliers. This resulted in cost pressure and conditions under which many farmers have great difficulties securing sustainable livelihoods, while also protecting the natural environment (Manning et al., 2012).

In the past, several attempts have been made to regulate coffee production and trade in order to prevent such exploitation of farmers. One of these was the International Coffee Agreement (ICA) in 1962. The ICA was set up by 58 producing and consuming countries to protect growing regions from significant price fluctuations, and to stabilize coffee supply along the value chain (Pichop & Kemegue, 2006). The primary mechanism used for price stabilisation was the restriction of supplies to a level sufficient to maintain coffee prices within an agreed upon range (e.g. in 1984, this range was between $1.20 and $1.40 per pound of coffee). These restrictions take the form of quotas, because to support the agreed price level, each producer agrees not to ship more than its assigned quota (Bates and Lien, 1985). This quota system ensured a stable coffee supply chain with stable prices. However, in the 1980's the ICA started losing its legitimate role as a regulating body. As a result, prices increasingly deviated from the free market prices, as exporters from producing countries began to trade with non-member importing countries for lower prices (Daviron & Ponte, 2005). In 1989, the members of the International Coffee Organisation failed to negotiate a new agreement. This resulted in the abandoning of the quota system.

As a result of this institutional failure at intergovernmental level, price competition increased and the market entry of new producing countries resulted in an oversupply which caused even more competition. The cost pressure led to decreasing labour conditions and quality problems, as farmers stopped investing in quality control and sustainable growing practices (Manning et al., 2012). Simultaneously, food consumption was increasingly characterised by food safety awareness, a focus on health and diet, globalisation of consumer tastes and social and environmental concerns (Ponte, 2004). As consumers became more aware of the environmental and social issues present in the coffee production chain, they raised their concerns. As a result, a number of private and multi-stakeholder initiatives have been launched to promote more socially responsible and environmentally friendly practices of coffee production (Kolk, 2005).

The currently still increasing number of standards organisations can be seen as efforts from civil society organisations or non-governmental organisations, but also of companies. As public attention, consumer concern and the globalization of supply chains often disrupt markets and create collective dilemmas for firms, firms develop an interest in cooperating to set enforceable standards, create credible responses to sceptical consumers and enforce constraints upon themselves and their competitors (Bartley, 2007).

Sustainability standards

All the initiatives from consumers, NGOs and companies mentioned before can be assigned as sustainability standards. Sustainability standards are process standards, which means that they typically assess the interconnected processes of production, processing and trade (Giovannuccia & Ponte, 2005). As stated in the introduction, sustainability standards involve the simultaneous pursuit of economic viability for farmers, environmental conservation and social responsibility. In other words, sustainability standards try to cover the triple bottom line.

Sustainability standards can be categorised into three different standards, namely private, public and voluntary standards. Private standards are set by individual companies like Starbucks, Sara Lee and Kraft and focus on the improvement of production and processing practices to enhance input efficiency and quality upgrading (Ruben & Zuniga, 2011). Public standards are set by governments and are mandatory. They often contain technical requirements and provide a mechanism for the government to control the food system (Henson and Reardon, 2005). Voluntary standards arise from a process in which key participants in an industry or sector seek consensus. Voluntary standards may be introduced as a response to consumer concerns or as a result of initiatives led by NGOs or industry associations (Giovannuccia & Ponte, 2005). Private standards are developed and monitored internally by individual enterprises. They often differ from voluntary standards because of their lack of third party verification and of a lower degree of transparency and participation of affected stakeholders (Ponte, 2004).

According to the Coffee Barometer (2012), seven key initiatives of sustainability standards can be identified. Four major coffee production standards that have independent monitoring and certification schemes are the Fair-trade Labelling Organisation (FLO), Organic (IFOAM), Rainforest Alliance (RA) and UTZ Certified (UTZ). These four standards are voluntary standards. Another important standard is the Common Code for the Coffee Community (4C), which relies on self-assessment. The 4C standard is a collaboration of public and private organizations. The establishment of the 4C standard is a collaboration of the German government together with coffee roasters, retailers and other companies from the coffee sector. Furthermore, there are two main private standards, namely Starbucks' Coffee and Farmer Equity Practices (CAFÉ Practices) and Nespresso's AAA guidelines. Like the other standards, these company standards seek to verify farm practices.

Next to the categorisation of standards into private and voluntary initiatives, standards can also be categorised into four broad categories, depending on who produces the guidelines and who conducts the monitoring. These categories are, according to Gereffi et al., (2001), first-, second-, third- and fourth-party regulatory systems. First-party certification is the most common system and involves a single firm developing its own rules and reports on compliance of the farmers. Second-party certification involves an industry or trade association fashioning a code of conduct and implementing reporting mechanisms. Third-party certification involves an external group, which is often an NGO, imposing its rules and compliance methods onto a particular firm or industry. Lastly, fourth-party certification involves government or multilateral organizations. The seven key initiatives in the coffee sector can be classified into these categories. First, the four major voluntary standards (Fair Trade, Organic, Rainforest Alliance and UTZ) are all third-party certification schemes, as they involve external groups setting the rules and compliance methods. Second, the 4C standard is a fourth-party certification scheme, since it is a multi-stakeholder voluntary scheme (Muradian & Pelupessy, 2005). The 4C code is set by multiple stakeholders, including the German government and companies. Finally, the two private standards of Starbucks and Nespresso are first-party regulatory systems, as they set their own standards. The classification of standards as private or voluntary and first-, second-, third- or fourth-party regulatory already shows that these standards differ in many aspects.

As can be seen from the classification of standards above, the distinction between private and voluntary standards is becoming increasingly unclear. Voluntary standards are by definition initiated by a NGO, whereas private standards are initiated by individual companies. However, some private standards are set up because of pressure from NGOs or by working closely together with NGOs. Starbucks' CAFÉ Practices is a private standard, but also collaborates with a NGO for monitoring. The 4C standard is also a joint effort from industry players and NGOs. UTZ Certified is a voluntary standard, but was initially set up by the Ahold Coffee Company, an industry player. The examples show that solutions to a more sustainable coffee sector are not easy to find and that a multi-stakeholder approach is probably the best method to achieve sustainability in this sector.

Key initiatives

All actors in the value chain need information on the characteristics, requirements and performances and market trends associated with the different standards in order to further invest in sustainability (Coffee Barometer, 2012). Decisions taken by the largest companies in the coffee sector affect the overall demand for sustainable coffee. Therefore, when considering the coffee value chain, it is important to look at their decisions. According to the Coffee Barometer (2012), more than half of the top ten roasters are members of the 4C association, and most of them have developed strategic alliances with the Fair Trade Labelling Organisation and UTZ certified. Others developed their own private coffee standards, of which Starbucks' CAFÉ practices is the largest. Based on these notes, this research will continue to only focus on the 4C, Fair Trade, UTZ and Starbucks' CAFÉ standards. Nowadays, these standards are regarded as being the key standards in the coffee sector and have the biggest influence on current practices.

Goal and focus of the key standards

The previous chapter has shown that there are seven key sustainability initiatives in the coffee sector. Four of them will be assessed further, namely Starbucks' CAFÉ standard, the Fair Trade standard, the 4C standard and the UTZ Certified standard. The focus is on these four standards, since they are frequently used and have a large impact on the entire coffee industry. In this chapter, the focus and goals of the four key standards will be elaborated. A major objective of implementing coffee standards is to improve the livelihoods of producers (i.e. coffee farmers). Prices and premiums are important elements, but are not the only or most important elements that determine the overall sustainability and improvement of livelihoods (Coffee Barometer 2012). Other key economic determinants of sustainable production include yield, access to markets, access to financing and costs of production (IISD and IIED, 2010). Additionally, social and environmental elements need to be taken into account.

In general, sustainability standards try to improve socio-economic and environmental conditions in production and trade (Giovannuccia and Ponte, 2005). According to Giovanuccia and Ponte, (2005), sustainability standards attempt to cover the whole value chain from farmer to consumer. However, not all sustainability standards cover the whole chain. For example, Fair Trade only focusses on sustainability at the farm level. The extent to which a standard covers the entire chain relates to who the initiator of the standard is. Starbucks' CAFÉ Practices is a private standard and with this standard, Starbucks tries to cover the whole chain from producers to their stores. Fair Trade on the other hand does not include sustainability along the whole chain, since it does not cover the entire chain up to the consumer. Fair Trade is only interested in sustainability at the farm level. This example shows that sustainability standards differ in their approach towards sustainability. Furthermore, the standards can include one or more aspects of this well-known people, planet and profit principle. The next section will review at which of these aspects the different standards focus on.

Fair Trade

Fair Trade International (FLO) is globally the most widely recognised ethical label (Fairtrade International, 2013). Its certification is carried out by an independent, separate company called FLO-CERT, that ensures the standards are met (Fairtrade International, 2013a). FLO-CERT is an independent company, that acts as a third-party verification actor. The definition of fair trade is 'a trading partnership, based on dialogue, transparency and respect, that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers, especially in the South' (Fair Trade Original, 2012). The Fair Trade organisation aims to promote fairer trading conditions and empowers farmers to combat poverty, strengthen their position and take control over their lives (Fairtrade International, 2013b).

The main goal of the Fair Trade standard is to guarantee a minimum price for the farmers. The farmers of a community are all connected to a cooperative, through which the coffee is sold (Raynolds, 2000). The farmers are paid a fixed price premium above the world market price and have a guaranteed minimum price, in case the world market price collapses (Raynolds, 2000). This price premium goes to the cooperative, which then divides the price premium between the farmers and invests a part of the premium in social, economic and environmental development projects. Which of these projects will be invested in is decided upon by the farmers and workers themselves (Fairtrade International, 2013c). The price premium is an example of the economic aspect of sustainability. By providing a price premium, farmers are economically able to produce sustainable coffee, since they can now afford to use more expensive and more sustainable production methods. Moreover, when a farmer asks for it, a buyer is obliged by Fair Trade to provide financial advances on contracts. The importers must offer pre-financing to farmers equal to 60 per cent of the contract value (Murray et al., 2006). Consequently, the farmer has access to capital and can overcome the biggest obstacles in sustainable development.

The Fair Trade standard also focusses on the social conditions of production. One of these conditions is that only democratically organised associations of small growers or plantations, where workers are represented by independent democratic unions, can be registered for Fair Trade production (Raynolds, 2000). This means, that in small producer organisations or cooperatives, there must be democracy. The conditions also state that more than half of the members must be small-scale farmers who do not depend on hired workers (Fairtrade International, 2013c). If a farm or plantation does have hired workers, the Fair Trade standard requires them to bring social rights and security to its workers. This includes rights to association, rights to safe and healthy work conditions, minimum social conditions, freedom from discrimination and prohibition of child and forced labour (Raynolds, 2000).

Finally, the Fair Trade standard focusses on the environmental conditions of production. However, there are only minimum agro-ecological requirements for Fair Trade producers. The environmental targets set by Fair Trade include: 'minimised and safe use of agrochemicals, proper and safe management of waste, maintenance of soil fertility and water resources and no use of genetically modified organism' (Fairtrade International, 2013c). These requirements do not meet the organic standards, but if producers do get an organic certification, they will receive a specified bonus on top of the price premium (Raynolds, 2000). Fair Trade gives certified organic coffee an extra price premium of $0.15 per pound of coffee (Murray et al., 2006).

The Fair Trade standard tries to focus on all three aspects of sustainability. However, the main goal is to act as a safety net against the unpredictable coffee market by providing security to coffee producers, so that they will get a price that covers their average costs of sustainable production (Fairtrade International, 2013d). Additionally, the empowerment of farmers and workers is an important goal. By demanding certain social conditions, Fair Trade makes sure that small farmer groups are democratic and that all workers are entitled to the price premium. It can be concluded that the main goals of Fair Trade are about the economic and social aspects of sustainability.

Starbucks' CAFÉ Practices

The Starbucks' Coffee and Farmer Equity (CAFÉ) Practices Program started as a pilot program in 2001, as a response to pressure placed on Starbucks during the late 1990s by activists. They demanded the introduction of a supply chain code of conduct and more fair trade purchases. The CAFÉ program was also driven by the chosen strategic business model, which required the establishment of sustainable supplies of high quality coffee and the development of a response to consumer awareness and concerns about product origins and the social and environmental dimensions of production (Macdonald, 2007). Compliance with the standard is verified by a range of third-party verification organisations that are overseen by the NGO 'Scientific Certification Systems' (Starbucks, 2013a). Third-party verification by a NGO is used to increase Starbucks' credibility in their sustainability efforts and does not indicate that the standard is also a voluntary standard. Since the CAFÉ Practices were initiated by Starbucks, it is regarded as a private standard.

The CAFÉ Practices standard is a broad set of social, economic, environmental and quality guidelines developed by Starbucks in collaboration with Conservation International. Starbucks aims to promote coffee production practices that protect biodiversity, maintain healthy ecosystems and support economic and social development in coffee production (Conservation International, 2013). To support one of the objectives, namely the quality guidelines, Starbucks offers technical support via farmer support centres. In total, there are currently 5 support centres, through which quality experts and agronomists can collaborate directly with the farmers to improve the quality and size of the harvest (Starbucks, 2013b). The quality guidelines are a prerequisite to obtain the CAFÉ standard. All coffee purchased from farmers must meet the quality standards set by Starbucks (Renard, 2010).

Besides the focus on quality, CAFÉ Practices also focusses on economic accountability. The standard requires economic transparency and full traceability from the farmer to Starbucks (Macdonald, 2007). This means that suppliers must submit evidence of payments made throughout the coffee supply chain to demonstrate how much of the price that Starbucks pays for green coffee actually reaches the farmer (Lee and Lee, 2007). Next to the quality requirement, this transparency is

also a contractual requirement that is included in the coffee purchasing contracts of suppliers (Renard, 2010). Another economic aspect of the Starbucks standard is the green coffee pricing model, which aims to pay the price that premium quality commands and has resulted in Starbucks paying an average price of $2.38 per pound for the premium quality green coffee in 2011 (Starbucks, 2013d). According to the International Coffee Organisation, (2013), the average market price in 2011 was $2.10 per pound. Therefore, compared with the conventional market, Starbucks pays a higher price. However, compared to Fair Trade, CAFÉ farmers generally receive lower prices than the price premium paid by Fair Trade (Macdonald, 2007). Furthermore, Starbucks also has a Farmer Loans program, which provides financial resources to cooperatives to fulfill their cash flow needs during harvest time and to make infrastructure investments that result in better competitiveness (Starbucks, 2013e).

The CAFÉ standard also focusses on social responsibility. The standard aims to ensure safe, fair and humane working conditions, including protecting the rights of workers and providing adequate living conditions. It also includes minimum wage requirements and requirements on child labour, forced labour and discrimination (Lee and Lee, 2007). Finally, the standard focusses on environmental leadership. This includes measures on managing waste, protecting the quality of water, conserving water and energy use, preserving biodiversity and reducing agrochemical waste. These measures are in place in the growing and/or processing steps of coffee production (Starbucks, 2013c).

Taken as a whole, it can be concluded that the Starbucks' CAFÉ Practices tries to focus on all elements of sustainability. As stated by Starbucks, (2013c), 'these guidelines help our farmers grow coffee in a way that is better for both people and the planet'. By growing coffee responsibly and by trading it ethically, the goal of the standard is to provide benefits to the business and communities of farmers and the environment. Therefore, it can be stated that the Starbucks' CAFÉ Practices focusses focus equally on all elements of the triple bottom line.

Common Code for the Coffee Community (4C) Association

The Common Code for the Coffee Community (4C) has been implemented in 2007, but negotiations already started in 2000 by the German Coffee Organisation and the Germany Agency for Technical Cooperation (Kolk, 2005). The 4C Association has the goal to 'unite all relevant coffee stakeholders in working towards the improvement of the economic, social and environmental conditions of coffee production and processing to build a thriving, sustainable sector for generations to come' (4C Association, 2009a). In order to achieve this goal, the 4C Association negotiated its code with producer federations from a range of coffee producing countries, trade and industry, NGOs and unions from both developed and developing countries and international organisations such as the World Bank and the International Coffee Organisation (Kolk, 2005). The current members of the 4C Association still include coffee producers, traders, coffee roasters, retailers and civil society, which includes non-governmental organizations, standard setting initiatives and trade unions (Neilson and Pritchard, 2007). The 4C standard has a large amount of multi-stakeholder input since the 4C Association thinks that when all actors cooperate, solutions to the sustainability challenges become easier (4C Association, 2009c). This way, the standard tries to achieve the goal of improving economic, social and environmental conditions of coffee production and processing.

The 4C standard includes ten unacceptable practices that all members should exclude before joining the association. The unacceptable practices are defined according to UN conventions, the UN Human Rights Declaration and national legislation. Unacceptable practices include amongst others forms of child labour, bonded and forced labour, prohibition to allow trade unions, lack of clean water for employees, use of banned pesticides and the cutting of primary forest (Manning and Von Hagen, 2010). The performance on the 28 principles are assessed through a so-called 'traffic light system'. For each principle, the practices are categorised as green, yellow or red. Green practices are desirable, yellow practices should be improved within a certain period of time and red practices should be stopped immediately. For coffee to be 4C Compliant Coffee, an average score of minimum yellow is needed (4C Association, 2009d). To monitor improvements of the farmers compliance, the

4C association relies on a self-assessment by farmers, followed by an independent third party verifier who visits farmers to check their self-assessment (Coffee Barometer, 2012).

Furthermore, the 4C Association standard has set out 28 social, environmental and economic principles for the sustainable production, processing and trading of green coffee (4C Association, 2009d). These 28 principles consist of 11 social principles, 11 environmental principles and six economic principles. According to the 4C Association, (2010), the main social principles are freedom of bargaining, which means that workers and producers have the right to be represented by an independent organisation of their choice, no discrimination, right to childhood and education, working conditions should be mutually agreed upon in a contract and partners and workers should receive training to improve their skills and work together towards improving living conditions. The environmental principles are predominantly about the conservation of biodiversity, minimising the use of pesticides and other chemicals, creating soil conservation and soil fertility, conserving water and energy resources and safe waste management. The six economic principles involve access to market data and prices, access to the market itself, assessment of coffee quality and the traceability of the origin in order to obtain a higher price, record keeping and transparent pricing mechanisms. It should be noted that the information on the principles come from the 4C Association itself and not from an independent research, since there is none on the principles of 4C.

Overall, the 4C standard focusses on all three aspects of sustainability. However, there are 11 social and 11 environmental practices and only six economic practices, which implies that the focus is more on the social and environmental practices than on economic practices. This indicates that according to the 4C Association, there are more issues to be solved on these two practices (i.e. social and environmental practices). When looking at the unacceptable practices, it also becomes clear that the challenges on the social and environmental practices are most important to the 4C Association, because these all involve social and environmental aspects of sustainability. Therefore, it can be concluded that the main focus and goals of the 4C standard are on the social and environmental issues.

UTZ Certified

The UTZ Certified standard stands for 'sustainable farming and better opportunities for farmers, their families and our planet' (UTZ Certified, 2013a). UTZ was originally set up by the Ahold Coffee Company (ACC) and a Guatemalan coffee supplier after they observed the benefits and limitations of the coffee market and consumer certifications available at that time (UTZ Certified, 2013a). Their goal was to implement sustainable quality on a large scale in the worldwide market. Currently, the goal of the UTZ Certified standard can be characterised as enhancing the transparency of the mainstream market. As ACC strived for the traceability of coffee, they helped increasing the market transparency which resulted in farmers being able to see what is paid for coffee to other farmers by other roasters (Manning et al., 2012). This transparency is important, since UTZ does not guarantee a price premium to the farmers. The focus of the standard is on ensuring full traceability and providing producers with access to markets for mainstream sustainable coffee (Ponte, 2004). Instead of providing a price premium, farmers are trained to be good business people. According to UTZ Certified, (2013b), this should enable them to produce more at lower costs while producing better quality harvests. Farmers are encouraged to negotiate a higher price that represents the increased quality of UTZ Certified coffee. The transparency of the market and the traceability of the coffee are important for farmers and producers in the price negotiation, as farmers are aware of the current market prices and producers are able to check the quality of the coffee.

In order to achieve UTZ certification, producers must comply with certain criteria, which are controlled and monitored by independent third parties (UTZ Certified, 2013b). First of all, UTZ requires better farming conditions. These include efficient use of resources, development of recordkeeping, managing harvest risks and the right way of treating crops. Second, UTZ demands that the social rights of workers are respected. The standard aims for better working conditions, including a safe and healthy environment, sufficient rest and salary, access to clean water and housing, the right to form and join trade unions and the elimination of discrimination and forced

labour. Third, UTZ focusses on a better care for nature. Farmers are trained to be careful and efficient in the way they use natural resources. The environmental requirements are, among others, respect for protected areas, preventing deforestation, minimising and/or optimising the use of pesticides and efficient waste handling. The last requirement is a better care for next generations. This includes requirements for the protection and development of children, such as the absence of child labour and presence of medical care, but also the protection and care of pregnant women in the form of maternity leave for workers. As in the case of the 4C standard, there is not much literature on UTZ Certified and therefore the information on the criteria comes from UTZ itself.

According to UTZ Certified, (2013b), with the help of the standard, farmers grow better crops, therefore generate more income and create better opportunities while safeguarding the environment and securing the earth's natural resources. To ensure this, the focus is on improving the management skills as well as the agricultural methods of farmers, by enabling farmers to learn (UTZ Certified, 2013a). From this, it can be concluded that the UTZ standard mainly focusses on the economic and environmental aspects of sustainability.

Summary

Table 1 provides an overview of the four standards discussed above. The table is based on the previous information and adapted from Auld, (2010), and Muradian and Pelupessy, (2005). As the information on the environmental impact of sustainability standards was limited, this research mainly focusses on the economic and social aspects of sustainability, as can be seen in Table 1.

Table 1: Overview of the sustainability standards

Name	Standard setting body	Control & monitoring	Focus of standard	Expected impact on income of farmers	Expected impact on livelihoods farmers
Fair Trade	Fair Trade Labelling Organisation (NGO)	Independent third party (FLO-CERT)	To provide better trading conditions; social development for small cooperatives; environmentally sustainable production	High. Fixed price premium above world market price and extra premium for organic certification	High. Brings social rights and security; socials development projects
CAFÉ Practices	Starbucks and Conservation International	Independent third party (CI)	Support economic and social development; economic transparency; good quality beans; protect the environment	Medium. Flexible price premiums for quality, decided upon by Starbucks	Medium. Brings social rights and safety
4C	German Development Agency and industry (MNCs, producers, society)	Self-assessment by farmers, checked by independent third party	Elimination of worst environmental and social practices; constant improvement	Very low. No price premium is included	High. Brings social rights; stimulates working on living conditions
UTZ Certified	UTZ Certified Foundation	Independent third parties	Improve management skills farmers; environmentally and socially sound practices; increase transparency market	Low. No price premium is included, but training to become good businessmen and to negotiate higher prices	Medium. Brings social rights and safety

Source: author

Economic, environmental and social impacts of compliance

Conformance to a sustainability standard can give producers several opportunities for upgrading, such as training, access to new markets and improved efficiency and revenues (Coffee Barometer, 2012). This chapter will review if compliance with a sustainability standard improves the economic, environmental and social situation of a small-scale farmer. If these aspects are indeed improved, it could be stated that standards create upgrading possibilities. Upgrading refers to making products more efficiently, and increasing value added by making more sophisticated products and taking on more sophisticated processes (Humphrey and Schmitz, 2000). This definition refers to upgrading as increasing the value added of production. In developing countries, increasing of value added is usually done by product and process upgrading (Van Dijk and Trienekens, 2012). First of all, process upgrading focusses on optimisation of the production process, for example with the help of new technologies. Secondly, product upgrading focusses on intrinsic and extrinsic attributes of the product (Van Dijk and Trienekens, 2012). The intrinsic attributes include for example quality and composition aspects, whereas extrinsic attributes are related to characteristics such as the impact on the environment, health and safety issues or fair trade. As became clear in the previous chapter, the four sustainability standards focus on intrinsic product attributes, as well as on optimisation of the production process. So, value adding activities do not only refer to better production methods, but also include the concepts of economic viability, social responsibility and environmental conservation. These concepts can only be seen as value adding if an actor in the value chain is willing to pay more for these specific sustainability aspects. Upgrading therefore can relate to all elements of sustainability. This chapter will review to which extent small-scale farmers are able to improve their economic, social and environmental situation by conformance to a sustainability standard. In other words, the impact of the sustainability standards on the dimensions of sustainability will be assessed.

The impact of Fair Trade in Latin America

To assess the impact Fair Trade has on the economic, social and environmental aspects of sustainability at small-scale farmers, available empirical studies have been used. A large amount of recent studies only examined the economic gains of compliance with a standard. However, a few of them also considered impacts on the livelihood of farmers; these are for example Arnould et al., (2009), Barham et al., (2011), Bacon, (2005) and Valkila, (2009). Bacon, (2005), conducted a research on the potential of Fair Trade and organic production to reduce the farmers' livelihood vulnerability in Northern Nicaragua. The results show that the 228 surveyed farmers grow coffee for generating an income, which is used to build houses and send children to school. When a farmer had access to a Fair Trade Certified market, they obtained higher average prices than conventional farmers. These prices were also significantly more stable than the world market prices. However, it must be noted that farmers only sold part of their coffee under the Fair Trade label. Up to 60 per cent of the farmers sold their coffee through conventional markets or to low-paying middlemen, to satisfy the immediate need for cash, while waiting for higher prices in the specialty markets. Therefore, the average price for coffee sold by a certified farmer is only slightly higher than that of a conventional grower. In this case, in the harvest of 2000-2001, a certified farmer received on average a price of US$ 0.56 per pound of coffee, compared to an average of US$ 0.40 per pound of coffee at the conventional markets. For that reason, even though prices of Fair Trade Certified coffee are twice as high as conventional coffee, respectively US$ 0.84 and US$ 0.41 per pound of coffee, farmers often were not able to earn back their production costs, which varied between US$ 0.49 to 0.79 per pound of coffee.

The study of Bacon, (2005), further shows that certification has a larger influence on the price obtained than the quality of the coffee. This means that coffee farmers get the higher price because the beans carry the Fair Trade label and not because of the higher quality of their coffee beans. Finally, the research shows that cooperatives allocate a portion of the higher price to invest in the community. Although this means farmers get a lower price, it also strengthens the local community and therefore the sustainability of the production. For example, cooperatives invested in productive infrastructure, providing credit, covering administrative and certification costs, providing

technical assistance and funding housing and education projects in farmer communities. These investments have a positive impact on the livelihoods of farmers and are possible because of the price premium paid.

A more recent study was conducted by Arnould et al., (2009), in the period 2004-2005. The research was intended to measure the impact of Fair Trade on income, educational attainment and health in three countries, namely Nicaragua, Peru, and Guatemala. In total, 1269 heads of households were questioned, of whom two-third was member of the Fair Trade Association. The economic results show that Fair Trade farmers out produce conventional farmers. In other words, Fair Trade farmers are more productive and use their lands more efficiently. Next to the higher productivity, the research also shows that Fair Trade farmers receive higher prices than conventional farmers. Therefore, from this research it can be concluded that participation in Fair Trade positively affects the income of small-scale farmers.

The results from Arnould et al., (2009), for educational attainment also show a positive correlation with income. Since Fair Trade farmers receive a higher income than conventional farmers, this can be seen as an indirect effect of Fair Trade membership on the level of education. Furthermore, the research showed that a child from a Fair Trade farmer had twice the probability of currently studying than a child from a conventional farmer. Finally, the research focused on the health of the farmers. Since illness is the result of a complex mixture of causes, the effect of Fair Trade participation on morbidity among the world's poor was expected to be small. However, the research showed that farmers who were Fair Trade Certified for at least six years had higher health indexes than others. This was mainly due to investments from the local cooperatives in health care education and facilities. The investments were financed by the price premium and created better access to medical treatment for the participating farmers.

The impact of Fair Trade in Ethiopia

The previous studies all focused on Latin American countries. The following research that will be discussed is a case study of Jena et al., (2012), which was conducted on Ethiopian farmers. In 2009, 249 coffee farmers from different cooperatives in South-western Ethiopia were questioned. The Ethiopian coffee sector is different from the Latin American coffee sector, since Ethiopia is struggling a lot with the production and marketing of their coffee. The use of standards is relatively new compared to countries in Latin America and therefore the welfare impacts of these standards have not yet been studied often. The research by Jena et al., (2012), shows that the Ethiopian farmers have a very low level of public services and infrastructure, including transport facilities, schools, health clinics and reliable sources of drinking water. Even though Fair Trade certification regulations claim that the price premium paid should be invested in building rural infrastructure, the local cooperatives have not invested in these services. This is because, the research shows, until the cooperatives or farmers write a project proposal and submit it to the union regarding the investment of the social premium, the social premium is kept in the union. Since certified farmers or cooperatives in Ethiopia often lack educational qualification, the farmers' community does not receive much of the premium.

Furthermore, both certified and non-certified Ethiopian farmers lack technical know-how in coffee farming, which results in low yield rates. The Fair Trade membership has not improved their production methods so far. Moreover, farmers reported severe yield losses due to coffee diseases and pests. In trying to deal with these problems, farmers have tried to consult with the development workers, however no real solution was found. Farmers do report that none of them uses herbicides, insecticides or fungicides, which has a positive effect on the environment.

The research shows that Ethiopian farmers do not experience any significant economic benefits from the certification. Jena et al., (2012), state that although the prices paid by the certified cooperatives to their members are slightly higher than that of conventional cooperatives, respectively 3.3 birr/kg and 3.21 birr/kg of coffee, the overall income was not higher. This is the case, because both certified and conventional farmers sell up to 75 per cent of their coffee to private

traders who do not make a price distinction between certified and non-certified coffee. Moreover, they incidentally even pay higher prices to non-certified farmers.

The Ethiopian case shows that poor organisational structures can block the benefits of certification to farmers. This case shows that the Fair Trade standard is not able to guarantee a higher coffee price to its members. However, this is mainly due to the fact that farmers sell most of their coffee to private traders. Another benefit of Fair Trade certification is supposed to be the investment of the price premium in local facilities. However, in Ethiopia this is not the case, since farmers are not able to write a project proposal for the investment of the premium. Therefore, no additional services are offered that could help to improve the position of farmers. In order to solve this problem, the level of education amongst the farmers has to increase. This could be done either by investment in education of the Fair Trade Organisation or by investments from the government of Ethiopia. Jena et al., (2012), conclude by stating that some cooperatives have fared better than others, as a result of a stronger organisational structure. By strengthening the organisational structure of the cooperatives, and especially the technical, financial and human capacities, farmers might be able to benefit from certification in the future.

Benefits of conformance to the Fair Trade standard

It should be noted that although Fair Trade certification does not deliver on its core values in Ethiopia, this is not the case for Latin American farmers. An important factor to take into account is that the national economic and institutional contexts matter. The extent to which Fair Trade certification can positively impact the livelihood of a farmer depends on the situation of the farmer. In Ethiopia, where there is a low level of knowledge, the benefits of certification are less than in Latin America, where certification does lead to higher income, higher productivity and investments in the community. As shown by Jena et al., (2012), the extent to which the positive effects are present depends largely on the capabilities of the local cooperatives. Additionally, the positive effects also largely depend on the amount of coffee sold as sustainable coffee (Bacon, 2005). Since many farmers sell up to 60 per cent of their coffee through conventional channels, no price premium is earned and therefore the benefits of the Fair Trade standard remain low.

Most research on comparing Fair Trade coffee farmers with conventional coffee farmers is conducted in Latin and Central America. Although the countries and methods used in these researches differ, the results are essentially the same. The research done by Arnould et al., (2009), Barham et al., (2011), Mendez et al., (2010) and Ruben and Zuniga, (2011), all point in the same direction of price gains, but all studies mention that the price gain is relatively limited and that income improvement is also limited. Furthermore, Beuchelt and Zeller, (2011), indicate that the higher prices paid do not overcome the higher production costs of the standard. Mendez et al., (2010), did find that the higher prices had a positive influence on the savings and credit of the farmers.

Apart from the economic aspects, Arnould et al., (2009), showed that participation in Fair Trade resulted in a higher level of education among farmers' children. Furthermore, the study showed that the Fair Trade standard had a positive impact on the health index of farmers and on the health facilities present in the community. Contrary, the study of Mendez et al., (2010), found that Fair Trade certification alone will not resolve the livelihood challenges faced by small-scale coffee farmers. The study shows that although certification does not have a direct effect on the livelihoods of farmers, Fair Trade could contribute to sustainable livelihoods, rural development and conservation processes in coffee regions. This can be done by developing more active partnerships between farmers, cooperatives, certifications and environmental and rural development organisations. As Mendez et al., (2010) state, Fair Trade can be effective in supporting capacity building and in serving as a network that influences global development funding for small-scale coffee producers. It can be concluded that the impact of Fair Trade is highly depended on the capabilities of the local cooperatives and on the amount of coffee sold under the Fair Trade label. Additionally, the partnerships between the relevant actors in the coffee chain, such as farmers, cooperatives, certifications and environmental and rural development organisations, can also affect

the benefits of the standard. When the actors work closely together, better results can be booked. So, whether or not farmers are able to benefit from certification also depends on the governance structure of the chain, as this refers to the power structures between actors in the chain and the distribution of income along the chain.

The impact of UTZ Certified, CAFÉ Practices and 4C on coffee farmers

Compared to Fair Trade, there are only few impact studies done on the other sustainability standards. For example, Neilson, (2008), conducted a research on Indonesian coffee farmers, but did not go in depth on the impact of the standards on the benefits for the farmers. He found that exporters in Indonesia were intensifying their supply-chain relationships with growers in order to create price transparency and thus complying with CAFÉ Practices requirements. Neilson, (2008), states that the integration of smallholders within vertical supply chains may cause increased farmers' access to information, knowledge and possibly also credit, and this way facilitates upgrading and quality improvement. However, this conclusion is not based on solid research. The research from Muradian and Pelupessy, (2005), shows that compliance with UTZ Certified and 4C leads to low price premiums and therefore to only little upgrading possibilities for smallholders. They state that participation in these standards is mainly a tool for accessing or remaining in particular markets. However, these conclusions are not based on extensive empirical research and should not be taken for granted.

There is one pilot study conducted by Giovanucci and Potts, (2008), on the impact of Organic, Fair Trade, Rainforest Alliance, UTZ Certified, CAFÉ Practices and 4C. This research has been done on behalf of the Committee on Sustainability Assessment (COSA), which is a part of the Sustainable Coffee Partnership. It should be noted that the research has not been publicised in a renowned journal and therefore the results and methods used can be questioned. The research was conducted on 51 farms in six countries (Kenya, Peru, Costa Rica, Honduras and Nicaragua). Giovanucci and Potts, (2008), emphasise that due to the small sample size, the observations can only be considered as indications. Therefore, in order to avoid the drawing of inappropriate conclusions regarding specific standards, the results are reported together, without specifically naming the standards being measured.

First of all, the economic outcomes are discussed. Giovanucci and Potts, (2008), show a general trend of a higher net income for certified farmers than conventional farmers. In other words, when farmers complied with a sustainability standard, their incomes increased. Although certified farmers have higher production costs since they have to meet the criteria of the standard, this did not result in a lower net income. An example of higher production costs is the increase of labour costs. The research shows that 55 per cent of the surveyed farmers found their labour costs increased through participation in a sustainability standard. Another economic outcome of the research relates to diversification. Nearly two thirds of the farmers noted that diversification of their farming practices had positive economic outcomes. Furthermore, farmers involved in sustainability standards reported improved access to market information as compared with their access before participating. Overall, 69 per cent of the certified farmers expressed that they experienced positive economic effects of the participation in a sustainability standard.

Second, the researchers focussed on environmental outcomes of participation in a sustainability standard and found that participating farms had better pollution prevention systems in place compared to conventional farms. Certified farms also scored better on waste management than conventional farms did. According to Giovanucci and Potts, (2008), other environmental aspects such as biodiversity will also score higher, but at the time of the research, there was a time lag between implementation and impact. Therefore, this research did not show evidence that certification had an effect on biodiversity, however it is expected to have a positive effect in the future.

Finally, the research focused on the social parameters of sustainability. Certified farms scored higher on indicators of health and safety than conventional farms. The indicators include access to medical services and first aid, access to drinkable water and better living conditions for workers. For

example, 42 per cent of the certified farms had written worker health policies, compared to only 10 per cent of conventional farms. Furthermore, written contracts and the existence of unions or worker organisations were twice as high on certified farms than on conventional farms.
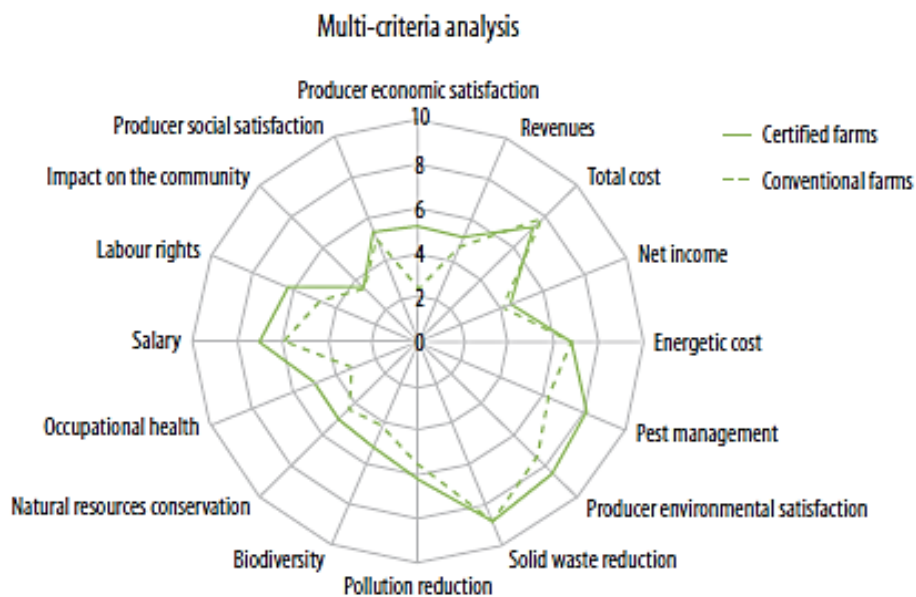

Figure 1: Comparison of conventional and certified farms across select social, economic and environmental indicators (Giovannuci and Potts, 2008, figure 4.3, pp.29)

From this research, it can be concluded that certified farms appear to have better economic, environmental and social conditions, as can be seen in figure 1 (Giovanucci and Potts, 2008, figure 4.3, pp. 29) There are of course many regional conditions that influence the impact of the standards However, in general the majority of certified farmers, 75 per cent, have experienced a net improvement of their overall condition. An even higher percentage, 90 per cent, of certified farmers indicated that they were 'likely' or 'very likely' to continue with the certification program. Although the results are based on a limited sample, they suggest that participants of standards are experiencing benefits from certification. The results may not be statistically significant, but they do point towards the direction that sustainability standards have positive impacts on farmers.

Since there is little research done on the impact of UTZ Certified, CAFÉ Practices and 4C, it is hard to compare the four sustainability standards with each other. However, in general it can be concluded that sustainability standards have a positive impact on the livelihoods of farmers. When the empirical studies on Fair Trade, UTZ Certified, CAFÉ Practices and 4C are taken together, it becomes clear that compliance with a sustainability standard has positive effects on the livelihoods of farmers. However, there is a large difference between countries and regions, due to local power structures and available resources. This can be concluded from the difference between the impact of Fair Trade in Latin America and Ethiopia. The capabilities of the local cooperatives and the partnership between relevant actors also play an important role in creating benefits for farmers. For example, Giovanucci and Potts, (2008), show that for small to medium farmers, sustainability is only possible when there is enough support, governance and infrastructural resources available. It seems that it is important that there is a strong local producer organisation to provide such requirements. When all local criteria are met, sustainability standards could improve the economic, social and environmental situation of a farmer.

Governance structure

As stated in the introduction, the governance structure is an important element of the value chain since it determines to a large extent how resources and gains are allocated within the chain (Gereffi, 1994). The governance mode of a value chain refers to the extent to which the leading segment exerts control over information exchange and production activities (Muradian and Pelupessy, 2005). In this chapter it will be reviewed how standards, in general, affect the governance structure of the value chain.

Governance structures

The concept of governance can be seen from different perspectives. Williamson, (1999) focuses on transaction cost as a driver for certain governance types. The transaction cost perspective focuses on governance of transactions in vertical bilateral relationships between firms (Williamson, 1999). According to Williamson, (1999), transaction characteristics are largely explanatory for governance structures in a value chain. Joint investments, the ability to measure the agent's performance and uncertainty are factors that influence the costs of transactions.

The global value chain perspective of Gereffi, (1994), and others, takes the transaction cost theory as a basis for further elaboration on chain governance. Initially, Gereffi, (1994), created two categories of governance modes for global value chains, namely 'producer-driven' and 'buyer-driven' value chains. Producer-driven chains are found in capital- or technology-intensive industries, where producers keep control of operations and outsource labour-intensive functions. Buyer-driven chains occur in more labour-intensive sectors, therefore also in the coffee sector. Buyer-driven chains are mostly controlled by downstream-located manufacturers, large retailers or trading companies (Muradian and Pelupessy, 2005). Later on, Gereffi et al., (2005), developed a categorisation of five governance types: market, modular, relational, captive and hierarchy, as can be seen in figure 2.
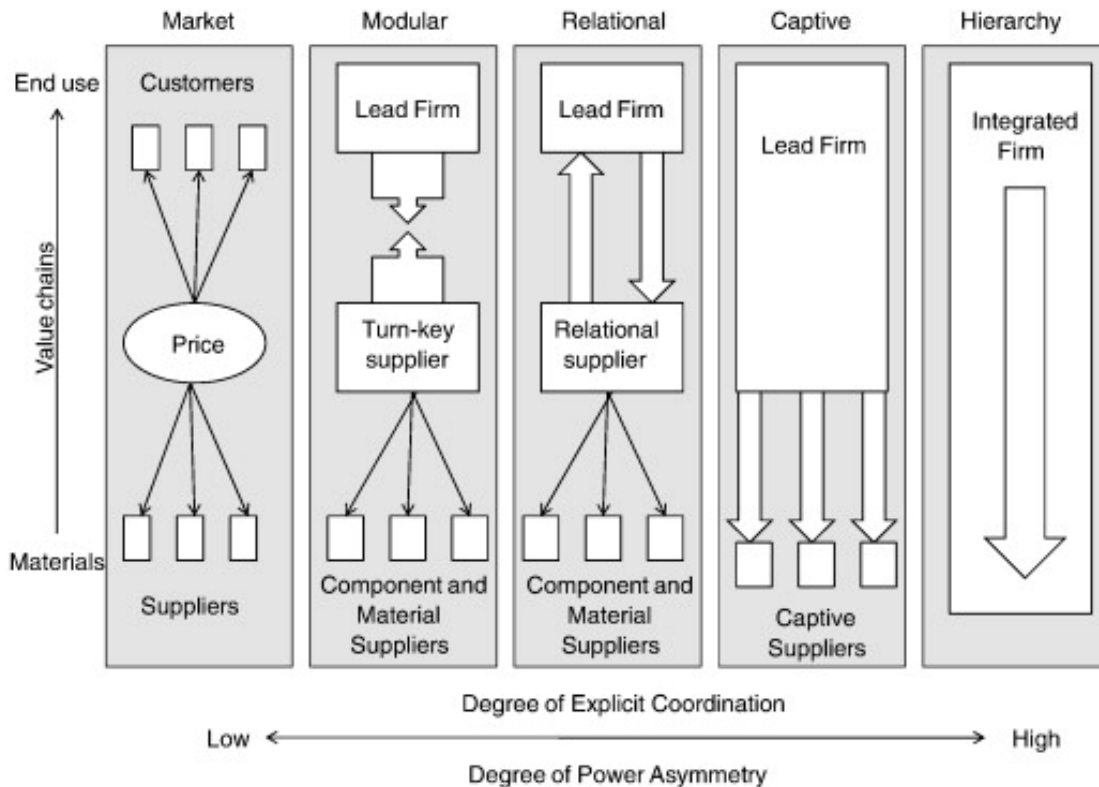

Figure 2: Five governance types (Gereffi et al., 2005)

These five types of global value chain governance are based on three factors explaining the structure and organisation of the chains: (1) the complexity of information involved in transactions, mainly

with respect to product and process specifications; (2) the extent to which this complexity can be mitigated through codification efficiently; and (3) the capabilities of the suppliers to meet the buyers' requirements (Gereffi et al., 2005). The first and second factors are based on the theory of transaction costs, as they determine the costs involved in transactions. The five governance types comprise a spectrum running from low levels of explicit coordination and power asymmetry between buyers and suppliers, in the case of markets, to high levels of explicit coordination and power asymmetry between buyers and suppliers, in the case of hierarchy.

Although Gereffi et al., (2005), developed the governance types based on industrial supply chains, it can also be used for examining food supply chains. For example, the market type of governance can be best compared with any type of commodity chain, where there are many buyers and many suppliers, who compete on price. In modular value chains already more information than merely prices is flowing between the suppliers and buyers. Here, suppliers make products to a customer's specification (Gereffi et al., 2005). In the food sector, this is the main governance type, as suppliers often comply with the wishes of buyers. For example with fruits, information about prices, but also on cultivation and origin, flows through the chain and the supplier tries to produce fruit that satisfies the buyer's request, e.g. harvest fruit that has not ripened yet. The next type is the relational value chain, where suppliers adapt their processes and products in such a way that pleases the buyer. There is interdependency between the buyers and suppliers, which is being regulated through reputation and trust. In the food sector, this can be seen as, for example, an organic retailer demanding only organic products from its suppliers. Captive value chains are characterised by small suppliers who are dependent on a few large buyers and who are captive due to long-term contracts. In the food sector, this can be compared with private label manufacturers. These are often small companies, who are completely dependent on the retailer for their existence. The last governance type is hierarchy, which is characterised by lead firms who develop and manufacture products in-house. In the food industry, this is the case with breeding companies, who develop a new breed and also produce it in-house.

Governance of the conventional chain

Within the conventional coffee chain, usually big firms in the downstream part of the chain are able to determine what coffee beans should be delivered, in what quantity and when and how these should be produced (Bitzer et al., 2008). These firms are called the lead firms and due to their downstream chain position, their brand names, their ability to retain large shares of coffee income along the chain and their effective management of information asymmetries, they are able to make the conventional chain a buyer-driven chain (Ponte, 2002). In buyer-driven chains, lead firms have a lot of power and therefore the income gained along the chain is allocated in favour of such lead firms and to the disadvantage of the upstream farmers (Bitzer et al., 2008). This means that farmers receive a lower price for their coffee, since lead firms primarily focus on making profit. In the conventional coffee chain, the lead firms are retailers and branded manufacturers.

Furthermore, not only do the farmers receive a lower income, the entry barriers are also low as the coffee quality required is low. When the entry barriers are low it is easy for farmers to enter the market, creating more competition in the market, which results in even lower prices for the farmers. Additionally, coffee is traded in common lots where individual differentiation is lost (Bitzer et al., 2008). This means that all coffee is mixed and then sold. When one farmer has invested in producing a higher quality, he will not receive a higher price for the quality, since the coffee is lost in the lots.

It can be concluded that in a conventional coffee chain, farmers do not have the power to act against lead firms and therefore, the conventional coffee chain can be seen as a buyer-driven chain. Moreover, the conventional chain can be regarded as being a market governance type, as it is characterised by market transactions between roasters/ traders and growers/ processors. The governance type market, as described by Gereffi et al., (2005), also fits the conventional chain, since the essential point is that the costs of switching to new partners are low for both parties. Furthermore, product specifications are relatively simple and suppliers have the capability to

produce the products in question with little input from buyers (Gereffi et al., 2005). The market value chain is characterised by high capabilities of suppliers, but in this case it only means that the farmers are able to deliver the demanded product (i.e. coffee beans).

Governance of the sustainable chain

Next to the classification of buyer- and producer-driven chains, Gereffi et al., (2005), established five modes of governance that go beyond the previous classification. Gereffi et al., (2005), identify a general shift towards modular forms of governance since standards, information technology and the capabilities of suppliers improve. Gereffi et al., (2005), take the relational value chain as a starting point. However, the conventional coffee chain is a market value chain, as discussed before. In the next part, the different aspects of governance will be discussed with respect to the sustainable coffee chain. The aspects of power structures, information exchange, supplier capabilities and control are the four major determinants of the governance structure in a value chain (Gereffi et al., 2005). Additionally, these are all influenced by the introduction of a sustainability standard. For these two reasons, these aspects are discussed.

Power structures

Research by Levy, (2008), has indicated that powerful buyers in value chains have a strong influence on the adoption of sustainability standards in the chain. In the coffee chain, this means that powerful buyers start requesting certified coffee and therefore, farmers comply with the standards. These standards then affect the governance mode in value chains, since they empower the institutions or actors that decide the criteria and control the administration, monitoring and/or certification (Ponte, 2004). In other words, those who control the standards have power over the users. It could thus be stated that standards influence the 'driven-ness' of a chain.

According to Gereffi, (1994), there are two kinds of 'driven-ness' in a chain, namely producer- or buyer-driven. As stated in the previous section, the conventional coffee chain is buyer-driven. The introduction of sustainability standards may induce a reduction in the degree of buyer-driven-ness and generate a move towards a producer-driven chain, as standards could improve a farmer's position with regard to traders and roasters (Muradian and Pelupessy, 2005). Standards could create producer empowerment, since most sustainability standards provide training to the farmers. Additionally, the standards create a more stable income, which means that farmers are able to invest in their production methods. Together with the training they receive, stable incomes could create upgrading possibilities for the farmers. This way, the farmers can become empowered and this could create a shift to a more producer-driven chain, where farmers are more in control. However, this is not the case, because every standard includes at least one large downstream company from a coffee consuming country that can be considered the lead firm within the chain (Bitzer et al., 2008). These lead firms participate in setting the standards, whereas farmers often lack this participation. This causes an imbalance in power right from the start (Bitzer et al., 2008). Because of this power asymmetry it is very difficult, if not impossible, for other actors to take over the lead role in the chain. Additionally, the farmers are dependent on the lead firm, which in this case is the standard setting body, for complementary activities and resources for production. Therefore, although standards should make the coffee chain more producer-driven, the standard setting bodies and other lead firms remain in control over the chain and thus the coffee chain remains a buyer-driven chain.

Information exchange

When a sustainability standard is implemented, the many precise specifications and requirements result in increased specificity of information (Azevedo and Silva, 2003). The specificity of information describes the extent to which the information about the product specifications is unique to the interaction between two firms. The information flow between the farmer and the standard setting body consists of prices, quality specifications and production methods, as well as market data on prices and information needed to provide traceability. Hence, with the introduction of a sustainability standard, the complexity of the information increases, but a standard also makes

codification possible. As many aspects of production are inherent to a certain standard, these aspects can be easily codified, resulting in a decrease in the complexity of transactions (Gereffi et al., 2005).

Another aspect of information exchange is information asymmetry. Some of the standards provide the farmers with information on market prices, economic transparency or full traceability. This decreases the information asymmetry, as farmers have access to more information than they would have in the conventional chain. The information asymmetry also influences the power asymmetry, since farmers become more knowledgeable about market prices and therefore can enforce higher prices for their coffee.

Supplier capabilities

With the implementation of a sustainability standard, the capabilities of the suppliers will increase. Standards can increase the capabilities through providing financial, administrative or technical training, through support centres or through training to become good business men. The increase in capabilities of the farmers affects the governance structure, because as farmers become more capable they also become more empowered. According to Gereffi et al., (2005), high supplier capabilities fit in market, modular and relational value chains only. However, this is not completely applicable to sustainability standards in the coffee chain, as all standards try to improve the capabilities of the farmers, but not all standards fit into these three types of governance structure.

Control

Standards may lead to the adoption of governance structures that provide greater control, since many aspects of the sustainability standards have to be monitored and controlled (Azevedo and Silva, 2003). According to Azevedo and Silva, (2003), first a company needs to adopt a governance structure with more control over the segments in the chain in order to control stages of the production processes that were not controlled before, in this case the coffee production at the farmer. Second, when there are difficulties in assessing the information needed for a transaction, the governance structure needs to allow for observation and control. Furthermore, the uncertainty can increase, since minor changes in the production process are no longer tolerated (Azevedo and Silva, 2003). The possible variance of an attribute in the production process creates risks on the transaction and therefore demands greater control over these aspects. If these aspects are hard to measure, the parties in the chain may opt for governance structures that provide greater control (Azevedo and Silva, 2003). With CAFÉ Practices for example, there is a high level of control between Starbucks and the farmers, since Starbucks buys all the coffee itself and wants to assure good quality coffee.

It should be noted that the increased level of control only holds for the bilateral relationship between the farmers and the standard setting body. With the increase of control between the farmers and the standard, other actors in the chain remain independent. For example, the level of control does not change between roasters and retailers. The explicit control needed for measuring a farmer's compliance with a standard could also be shifted to a third-party certifier. In other words, the standard setting body does not control the farmers themselves, but relies on a third-party for measuring compliance. In this way, the bilateral relationship between a standard setting body and the farmer does not have to change into a more control-based governance mode, but the overall governance mode will still change, since the high level of explicit control is still necessary for the third-party certifier.

Another example of the increase of control with sustainability standards is the closing of long-term contracts with the farmers. The sustainability standards put a lot of effort into increasing the capabilities of the farmers and providing them with the necessary support. Therefore, lead firms seek to lock-in farmers in order to exclude others from reaping the benefits (Gereffi et al., 2005). This results in significant switching costs for the farmers and they are therefore called 'captive', as they are under the control of the lead firm. Not all sustainability standards lead to this governance type. The Fair Trade standard for example does not lock-in suppliers, since they can sell their coffee to all roasters and other buyers. The Starbucks' CAFÉ standard on the other hand, does lock-in suppliers by closing long-term supply contracts.

Mutual impact of the key standards and governance structure

In the following part, it will be reviewed how the four sustainability standards change the governance structure of the coffee chain. The aspects of governance from the previous chapter will be applied to the four sustainability standards examined, as can be seen in Table 2. The influence of sustainability standards and governance structure on each other will be assessed in the next part.

Table 2: Governance aspects set against aspects of sustainability standards

Aspects of governance structure	Fair Trade	CAFÉ Practices	4C	UTZ Certified	Mutual influence of standards and governance structure
Information exchange/ codification	High amount of information, but codified through standard	High amount of information, but codified through standard	High amount of information, but codified through standard	High amount of information, but codified through standard	Standards increase the specificity of information, but through codification, standards reduce the complexity of information
Capabilities of suppliers	Technical, administrative and financial support	Support centres	No support	Training to become good businessmen	Standards provide support and thus increases capabilities of suppliers
Information asymmetry	No market data or traceability is provided, so high	Full traceability; economic transparency	Access to market data; traceability systems; transparent pricing mechanisms	Transparent market; full traceability	Information asymmetry influences the power asymmetry and thus the empowerment of farmers
Power asymmetry between buyers and farmers	Tries to empower farmers	Starbucks buys all coffee themselves	Multi-stakeholder input	Provides management training to farmers	Power asymmetry determines who is the leader and thus the extent to which value added is distributed along the chain
Control	Third party monitoring	Third party monitoring; high control of quality	Third party monitoring	Third party monitoring	Explicit control from the lead firm creates little opportunities for empowerment of the farmers

Source: author

Fair Trade

As described before, the Fair Trade standard wants to promote fairer trading conditions and empower farmers. One of the ways the Fair Trade standard tries to empower small-scale farmers is by providing them with a minimum price and price premium. Through this guaranteed minimum price, farmers have established a more stable income than they had before. As a result, more stable incomes create strengthened security of land tenure and reduce pressure for individuals at the household level to migrate in search of income. Furthermore, stable incomes are able to create greater incentives for farmers to invest both in increased farm productivity as well as more sustainable production methods (MacDonald, 2007). The uncertainty and risks associated with the transaction decrease, because as farmers' incomes become more stable, they will also invest in their production process.

Although the price premium could also decrease the opportunistic behaviour of farmers, this is not the case. One would assume that farmers are unlikely to switch to other partners, since they want to ensure their higher income. However, as can be seen in Latin America, farmers sell up to 60 per cent of their coffee through conventional channels. This indicates that providing a price premium does not decrease the opportunistic behaviour of farmers. It can be concluded that by providing a minimum price, the uncertainty and risks of a stable supply associated with the transaction between farmers and traders is reduced, because although farmers also sell their coffee through conventional channels, they also invest in their production and the higher income creates a strengthened security of land tenure. With the decrease in risk and uncertainty, transaction costs will also decrease.

Another aspect of Fair Trade is that it tries to empower farmers by giving them access to micro-finance. If asked for, farmers can receive pre-financing of up to 60 per cent of the contract value. This also ensures a more stable supply, as it provides farmers with income when they need it to ensure the production. Next to financial support, Fair Trade offers producer co-operatives technical and administrative assistance (MacDonald, 2007). By providing financial, technical and administrative assistance, Fair Trade tries to strengthen the producer co-operatives. Strengthened organisational capabilities then enable producer co-operatives to perform collective governance functions that the national government is failing to perform effectively, such as building infrastructure and creating health care. Fair Trade thus enables farmers to contribute directly to socially oriented rural development processes (MacDonald, 2007). By providing assistance to the co-operatives, Fair Trade increases the financial, administrative and technical capabilities of the farmers. According to Gereffi et al, (2005), the capability of suppliers to meet the buyers' requirements is one of the factors that influence the governance structure of the chain.

Another important aspect for the governance structure is the use of third-party certification. Fair Trade does not monitor compliance of the farmers with the standard themselves, but relies on a third-party (FLO-CERT) for control. This third-party can exert sanctions in the name of Fair Trade to regulate the compliance of farmers. Therefore, the Fair Trade standard does not lead to more control based governance structures between Fair Trade and the farmers, as Fair Trade does not control the farmers itself. However, there is still a high level of control between the third-party certifier and the farmers. The inspection and monitoring of the farmers is also important for further strengthening of the producer co-operatives, as it encourages increased attention to effective management, participation, coffee quality and other issues (Taylor et al, 2005).

To conclude, the Fair Trade standard empowers the farmers by providing pre-financing, minimum prices and technical and administrative support. This reduces the risks and uncertainty associated with the transaction. Furthermore, by providing support to the farmers the capabilities of the suppliers increase. As previously described, the conventional chain was characterised as a market. The Fair Trade standard tries to make a shift from a market form towards a more modular type of governance. In modular value chains, transactions are simplified by reducing component variation and by unifying product and process specifications (Gereffi et al, 2005). Since all the coffee carries the Fair Trade label, which indicates specific product and process specifications are met, the transactions can be codified. This indicates that the Fair Trade standard is shifting the governance mode towards a modular type. In modular value chains, little direct monitoring and control takes place, which would result in little coordination from Fair Trade directly to the farmers. However, the third-party certifier does exert control, so this does not fit the modular value chain perfectly. Higher levels of control indicate a shift towards a more relational value chain, as these are characterised by high levels of explicit coordination and the exchange of complex information, that bring high costs for switching to new partners (Gereffi et al, 2005). Both relational and modular value chains are characterised by high capabilities of the suppliers which matches with the Fair Trade farmers, who receive training to increase their capabilities. Overall, it can be concluded that Fair Trade creates a shift in governance type from a market to a modular/relational value chain.

Starbucks' CAFÉ Practices

Starbucks' CAFÉ Practices' predominant goal is to promote coffee production practices that protect biodiversity, maintain healthy ecosystems and support economic and social development in coffee production (Conservation International, 2013). One of the ways CAFÉ Practices supports the development in the coffee sector is through farmers support centres. Here, farmers can collaborate with experts to improve the yield and quality of their coffee. This helps to decrease uncertainty of supply associated with coffee production, since farmers become more educated, they learn how to cope with certain environmental circumstances. This will result in higher yields and therefore also in higher incomes for farmers, as Starbucks assists the farmers in enhancing their production efficiency. As a result, production costs are reduced, coffee quality is enhanced, and the price farmers get for their coffee increases (Bitzer et al, 2008; Arnould et al, 2009). By providing such support, CAFÉ Practices affects both the uncertainty of a stable supply associated with the transaction, as well as the capabilities of the suppliers. The uncertainty and risks associated with production decrease as farmers become more educated and can ensure a more stable production. The capabilities of suppliers also become higher, as farmers are educated about quality and receive technical support.

Another important aspect of the standards is the full traceability and economic transparency demanded by CAFÉ. It must be completely transparent for the farmers what payments are made for the coffee throughout the supply chain. Additionally, full traceability is required. This means it must be able to trace back where the coffee came from. In order to have a good traceability system a lot of information needs to be exchanged. This increases the complexity of the transaction, since much more information is now involved in the transaction.

Furthermore, Starbucks pays a higher price for the coffee than the conventional prices. This, together with the Farmers Loans Program, creates more stable and higher incomes for the farmers. Starbucks also stimulates the use of long-term contracts, thereby bringing greater stability and predictability for both producers and buyers (Bitzer et al, 2008). As described previously, stable incomes create greater incentives for farmers to invest both in increased farm productivity as well as more sustainable production methods (MacDonald, 2007).

Lastly, Starbucks does not control the farmers itself, but uses third-party certification. As was the case with Fair Trade, this means that there is a high level of control between the third-party certifier and farmers. However, since Starbucks buys all the certified coffee itself, Starbucks does exert more control over the farmers than Fair Trade. Since Starbucks buys the actual coffee produced under the CAFÉ standard themselves, the quality is very important. Additionally, Starbucks provides full economic transparency and traceability to farmers. In order to be able to provide full transparency and traceability, there must be a certain amount of control from the lead firm. Therefore, although there is third-party certification, the level of explicit control between the farmers and standard setting body is higher with Starbucks then with Fair Trade.

Since Starbucks puts a lot of effort in increasing the capabilities of the farmers, in providing them with full economic transparency and traceability and by paying them higher prices for the coffee, they do not want others to reap the benefits of their effort. Therefore, Starbucks closes long-term contracts with farmers in order to lock-in their suppliers. This results in significant switching costs for farmers and they are therefore called 'captive'. It indicates that the CAFÉ standard induces a shift towards more captive value chains. Besides locking-in suppliers, captive value chains are also characterised by a high complexity of transactions and high levels of intervention and control from the lead firm (i.e. Starbucks) (Gereffi et al, 2005). The high levels of control also fit this standard, since the introduction of standards goes hand-in-hand with increased monitoring and control and more integrated governance such as long-term contracts (Trienekens, 2011). The high complexity of transactions also matches this standard, as there is a lot of information flowing between the buyers and the farmers. The complexity increases even further by the use of traceability systems and transparency, since more information flows between buyers and farmers for a single transaction than before.

Common Code for the Coffee Community (4C) Association

As described earlier, the 4C association aims to unite all relevant coffee stakeholders in working towards the improvement of the economic, social and environmental conditions of coffee production. Of particular importance in their approach towards a sustainable coffee sector is the multi-stakeholder input, used to set the standard. The members of the 4C association include coffee producers, traders, roasters, retailers and civil society in the form of NGOs. By including farmers in the standard setting process, sustainability standards could provide a more equitable forum for governing relations and activities along the supply chain than that provided through the market alone (Ponte, 2004). Moreover, if coffee buyers alone would decide what is included in sustainability standards and how they are measured, the standards would facilitate an even higher degree of 'buyer-drivenness' in the coffee chain. Since the 4C standard includes all actors in the coffee chain, the governance type is no longer 'buyer-driven' but makes a shift towards 'producer-driven'. It is too early to state that the 4C chain is currently 'producer-driven', since retailers and other large upstream companies are also involved in the standard setting procedures. Additionally, the large upstream companies are still the buyers upon which the farmers depend. Yet, it can be stated that the 4C coffee chain is no longer solely 'buyer-driven', as farmers are able to participate in the standard setting procedure and their voices are heard. Overall, it can be stated that the 4C standard creates a small move on the continuum from the buyer-driven side to the producer-driven side.

Other important aspects for the governance structure include the economic principles of the 4C standard. These include access to market data and prices, transparent pricing mechanisms and traceability of the origin of the coffee. The economic principles are set for the farmers, so that they are able to obtain higher prices when selling their coffee. The 4C standard does not provide a minimum price or a price premium, but instead provides farmers with all necessary information to negotiate good prices themselves. This empowers farmers and helps them create more stable and higher incomes, which in turn is good for the uncertainty and risks associated with the coffee production, as farmers will invest in their production methods. Furthermore, transparent pricing mechanisms and access to market data and prices decrease the information asymmetry on the market, because farmers have access to more information.

Since 4C uses multiple-stakeholder input, the power asymmetry between farmers and buyers is relatively lower compared to the other standards, where the farmers have no influence on the standard setting body. Lower power asymmetry is one of the characteristics of a modular value chain and therefore the 4C standard can be seen as making a shift towards modular value chains. In modular value chains, switching customers and suppliers is relatively easy; this also is the case with the 4C standard. Farmers can sell their coffee to any buyer and are not tied down to a single buyer, as is the case with Starbucks' CAFÉ standard. Furthermore, the modular value chain is characterised by lower levels of explicit coordination and control. This does not fit the 4C standard, as 4C uses third-party certification to control compliance of the farmers. This means that there still is direct control, although it is now controlled by a third-part instead of by 4C itself. These higher levels of control do fit the relational value chain, which is characterised by high levels of explicit coordination. Additionally, 4C also aims to empower farmers and thus tries to increase the capabilities of the suppliers. This matches with characteristics of both modular and relational value chains. Finally, as with the other standards, the complexity of the transaction increases, but through the standard this information can be codified. All these aspects together make it clear that the 4C standard creates a shift towards a modular and relational type of governance. Most aspects fit the modular value chain, but the higher control levels fit the relational value chain. On the continuum of governance types, the 4C standard will therefore be positioned more towards relational value chains.

UTZ Certified

UTZ Certified aims to create sustainable farming and better opportunities for farmers, their families and our planet (UTZ Certified, 2013a). One of the ways UTZ tries to create better opportunities for farmers is by providing them with market information. As with the 4C standard, UTZ wishes to provide farmers with market information on prices. Additionally, like Starbucks, UTZ also provides full

traceability to the farmers. This can benefit farmers in negotiating a better price, because when there is full traceability in a chain, the coffee can be traced back to the farmer. As such, a buyer gains more information about the product and its quality. This could result in better prices for farmers, since a buyer can trace the quality of coffee. By providing farmers with traceability systems and market information, the information asymmetry also decreases. Furthermore, instead of providing a price premium, UTZ trains farmers to become good business people. In this way, farmers can negotiate a higher price, which in turn gives them a more stable and higher income. As stated before, this can create greater incentives for farmers to invest both in increased farm productivity as well as more sustainable production methods (MacDonald, 2007). By providing farmers with training and market information, farmers are empowered and their capabilities increase. Furthermore, risks and uncertainty associated with the supply for the buyer decreases, as farmers are more knowledgeable about the production processes.

Another important aspect of UTZ is that it also uses third-party certification for monitoring a farmers' compliance. This implies that, as with the other standards, UTZ does not monitor compliance of farmers with the standard themselves, but relies on a third-party for control. Therefore, the standard does lead to more control-based governance structures, even though UTZ does not control the farmers itself. It can be concluded that UTZ also shifts towards a modular value chain, since UTZ also tries to empower farmers and thus tries to increase the capabilities of the suppliers. Furthermore, the UTZ standard simplifies the transaction by unifying specifications and makes codification of the transaction possible. These elements are all characteristics of a modular value chain. As with the other standards, UTZ uses third-party certification, which increases the level of control. This matches the relational value chains as described by Gereffi et al, (2005). To conclude, UTZ Certified can be seen as creating a shift in governance type from the market form to modular/relational forms.

Conclusion

Table 3 provides an overview of the governance aspects of the standards. The table is based on the previous information.
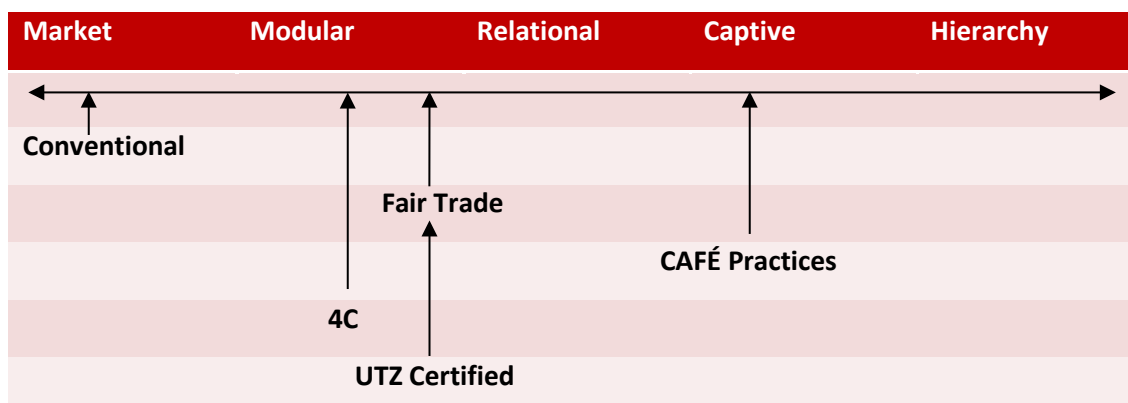
Table 3: Overview of the governance aspects of the sustainability standards

Name	Complexity of transactions	Ability to codify transactions	Capabilities in the supply base
Conventional	Low	High, because there is little to be codified	Low, but farmers are able to deliver coffee beans
Fair Trade	High, includes information on product and process characteristics	High, through the standard	Higher, farmers have access to technical, administrative and financial support
CAFÉ Practices	High, includes product and process characteristics and also information on traceability and economic transparency	High, through the standard	Higher, farmers have access to support centres
4C	High, includes product and process characteristics and also information about market data and prices	High, through the standard	Medium, farmers are stimulated to empower themselves
UTZ Certified	High, includes product and process characteristics and also market information on prices and traceability	High, through the standard	Higher, farmers are trained to become good businessmen

Source: author

Table 4 provides an overview of the different sustainability standards and their position along the continuum of governance types. Since the standards do not correspond to one governance type only, they are positioned along the continuum.

Table 4: Overview of the shift in governance types of the sustainability standards

Market	Modular	Relational	Captive	Hierarchy
Conventional				
	Fair Trade			
			CAFÉ Practices	
	4C			
	UTZ Certified			

Source: author

As described above, all standards create a shift in governance structure away from the market form of the conventional chain. Fair Trade, 4C and UTZ all make a shift towards a more modular and relational type of governance, whereas CAFÉ shifts towards a more captive form of governance. This can be explained by the fact that CAFÉ is a private standard, whereas the others are voluntary

standards. Starbucks is both the standard setting body as well as the buyer of the certified coffee. Therefore, they exert more control over the production process, because they want to make sure the right quality of coffee is produced. Furthermore, Starbucks wishes to ensure a stable supply and therefore they close long-term contracts with farmers. This way, farmers become 'captive'. Fair Trade, 4C and UTZ on the other hand do not buy the coffee themselves and thus farmers can sell their coffee to multiple roasters. Therefore, suppliers and customers can be easily linked and de-linked, resulting in a very fluid and flexible network structure (Gereffi et al, 2005). In other words, in modular global value chains, as in markets, switching customers and suppliers is relatively easy. Power asymmetries remain relatively low because both suppliers and buyers work with multiple partners. However, in the coffee sector, this is not always the case. With Fair Trade and UTZ, farmers are still for a large part dependent on the lead firms in the chain, as farmers need the lead firms to buy their coffee. With 4C on the other hand, the power asymmetry has decreased compared to the other standards, since farmers are involved in the standard setting procedure. This does not imply that they have gained more power against the lead firms, but at least their voices are heard. Another aspect of both modular value chains and relational value chains is that they enhance the capabilities of the suppliers. These characteristics match with all standards.

Another aspect of governance is the complexity of transactions and the ability to codify such transactions. Both captive and modular value chains are characterised by a high complexity of transactions, but also by a high ability to codify the transactions (Gereffi et al, 2005). The relational value chain is not characterised by the ability to codify transactions, hence this aspect does not match with the standards. However, it does involve the exchange of complex information. In modular and captive chains on the other hand, the specifications of a product can be codified through the certification labels. Therefore, in general, standards create a high complexity of transactions, but also a greater ease of codification. This is also the case with all four sustainability standards analysed.

Additionally, Fair Trade and UTZ Certified also make a shift towards more relational value chains, because of the level of explicit control. All four standards use third-party certification, indicating that there are high levels of control between the farmers and third-party certifiers. Since high levels of explicit control are an aspect of relational value chains, the standards also make a shift towards relational value chains.

Conclusion

This thesis tried to review how sustainability standards affect the governance structure and upgrading of the coffee value chain. The four sustainability standards reviewed all have different impacts on the upgrading possibilities of small-scale farmers and the governance structure of the coffee supply chain. First, the four standards studied, being Fair Trade, Starbucks' CAFÉ Practices, 4C and UTZ Certified, are structured differently. Fair Trade, 4C and UTZ are regarded as being voluntary standards, set by NGOs or industry associations. CAFÉ Practices on the other hand is a private standard, set by Starbucks. The focus and goal of these standards is, as is the case for all sustainability standards, on improving the social, environmental and economic conditions of small-scale coffee farmers. The economic principles differ the most between the standards, since Fair Trade and CAFÉ Practices provide a price premium, whereas 4C and UTZ Certified do not. All standards state to focus on the environmental impact of production, but the information on the impact of this topic is relatively small compared to the social and economic impact. Therefore, it could not be properly assessed whether or not the sustainability standards truly focussed on this aspect and whether or not their efforts were successful.

Upgrading

To review the impact of the four sustainability standards on the economic and social conditions of the farmers, several available empirical studies have been used. From the studies on the impact of Fair Trade it could be seen that farmers experienced price gains. The average prices received by the cooperatives were higher than those for conventional coffee. Additionally, these prices were significantly more stable than the world market prices. However, although the farmers received higher prices, the income improvement was relatively limited. This is partly due to the fact that cooperatives invest a part of the higher price in the community. These investments result in little increases in incomes for the farmers, but it also strengthens the local community by investing in infrastructure, education and housing projects. The price premium provided by Fair Trade can therefore be seen as having a positive impact on the livelihoods of the farmers. Furthermore, Fair Trade farmers were more productive than conventional farmers. Combined with the higher prices, this also increases the income of certified farmers compared with conventional farmers. Studies also showed that income was positively correlated with education, meaning that farmers linked to Fair Trade had higher levels of education than conventional farmers with lower incomes. Finally, the studies showed an increase in health indexes when farmers joined Fair Trade.

These positive results only hold for coffee farmers in Latin America. From other studies it can be concluded that the impact of Fair Trade depends heavily on the national economic and institutional contexts. In Ethiopia for example, no part of the price premium was invested in the community. This was mainly due to a lack of educational qualification, meaning that the cooperatives were unable to write an investment proposal. Furthermore, Fair Trade membership did not improve the production methods and yield of the farmers. Even though farmers did receive higher prices, their overall income did not increase significantly because of the bad yield. The difference between Ethiopia and Latin America is mainly due to different contexts. Studies show that some cooperatives have fared better than others, which is mainly due to the difference in technical, financial and human capacities. When the cooperatives lack the capacities needed, Fair Trade does not bring many benefits to the farmers. However, in Latin America Fair Trade does increase the social and economic conditions of a community. It can be concluded that Fair Trade can bring benefits to the farmers, but that it depends on the strength of the organisational structure and capacities of a cooperative.

Considerable less studies have been done on the impact of CAFÉ Practices, UTZ Certified and 4C on the livelihoods of farmers. However, from the available studies it can be concluded that CAFÉ Practices provides farmers with increased access to information, knowledge and credit. From the other general studies it became clear that certified farmers have slightly higher incomes, are healthier and have more access to social rights than conventional farmers. Additionally, certified farmers reduced the environmental impact of production. Overall, it can be concluded that

compliance with one of the sustainability standards creates upgrading possibilities for the farmers, as they have access to finance, support and basic social conditions that are important prerequisites for upgrading.

Governance structure

Although sustainability standards can bring benefits to farmers, power relations may remain the same if the chain remains buyer-driven. All four sustainability standards try to empower the farmers. However, none of the standards is able to create a producer-driven chain, since the big roasters and retailers continue to be the lead firms that have power over the farmers. 4C is the only standard that creates a shift away from a buyer-driven chain, as farmers are involved in the standard setting procedure. Since the farmers still depend on buyers, 4C also cannot be seen as producer-driven. Compared to the other standards, 4C does try to create a shift away from a buyer-driven chain, whereas the other standards do not. Overall, it can be concluded that sustainability standards hardly create a change in the power relationships of the chain.

The four sustainability standards do create a shift in governance structure away from the market form of the conventional coffee chain. The differences in shifts of governance type can be explained by the difference between the standards. For the complexity of information for example, Starbucks, 4C and UTZ provide information on market data and prices to the farmers, whereas Fair Trade does not. Additionally, Starbucks and UTZ provide the farmers with full traceability, which also increases the complexity of information. The increase of the supplier capabilities also differs, as the amount of support provided differs between the standards.

Another difference between the standards is the degree of control exerted by the standards on the farmers. All four sustainability standards use third-party certification, which means there are high levels of explicit control. CAFÉ Practices increases the level of control even further compared to the other standards, since Starbucks buys all the coffee produced under the CAFÉ label. Therefore, Starbucks aims to ensure a good quality and a stable supply. This is achieved by closing long-term contracts with the farmers and thereby they become captive. The CAFÉ Practice standard can be seen as making a shift from a market form to a captive form of governance structure. The captive form fits CAFÉ Practices, since the complexity of transactions is high, the ability to codify the transaction is high, the capabilities of the suppliers are increased and because there is a higher level of control and power asymmetry.

Farmers certified at Fair Trade, UTZ Certified and 4C on the other hand experience lower levels of power asymmetry and they can sell their coffee to multiple roasters. The farmers and buyers can be easily linked and de-linked. Therefore, these three standards can be regarded as making a shift towards modular value chains. In modular value chains power asymmetries remain relatively low, as both farmers and buyers work with multiple partners. Modular value chains are also characterised by a high complexity of transactions, a high ability to codify transactions and an increase in the capabilities of suppliers. These characteristics match with the standards Fair Trade, UTZ Certified and 4C and they therefore create modular value chains. Fair Trade and UTZ Certified, and to a lesser extent 4C, can also be regarded as making a shift towards relational value chains. With these three standards, the level of explicit control increases compared to the conventional chain. These higher levels of control do not fit the modular value chain, but do fit in the relational value chain.

The mutual influence of upgrading and governance structure

For answering the main question 'How do sustainability standards affect the governance structure and upgrading of the coffee supply chain?', it must be evaluated how upgrading and governance structure influence each other. First of all, upgrading possibilities are facilitated by a proper governance structure. In order for the farmers to experience benefits from a sustainability standard, the cooperative should have a good organisational structure. From the evidence of Fair Trade in Ethiopia, it became clear that without a proper organisational structure, upgrading was not possible.

Second, sustainability standards make a shift in governance structure from a market type towards modular-relational or captive types of governance. The shift in governance structure involves increased capabilities for the farmers and a potential decrease in power asymmetry, as farmers become more and more empowered through the standard. Through the standard, upgrading and governance structure can influence each other to the benefits of farmers, as farmers gain more capabilities and power asymmetry decreases, shifts towards other governance structures can be made. Here, the differences between the standards play an important role, as some standards may create more upgrading possibilities for the farmers than others. If farmers are continuously supported by sustainability standards to be empowered, the coffee chain may eventually change into a more producer-driven chain. However, this is an extreme case and not likely to happen in the near future, since lead firms still dominate the chain. If, on the other hand, the 4C standard becomes bigger and gives more power to the farmers than only participation in the standard setting procedure, there is a chance that the power will shift.

Additionally, it should be noted that the empowerment of farmers and the potential shift in governance structure depends on the sustainability standard, as there are large differences. For example, it is unlikely that the coffee chain will become more producer-driven with the CAFÉ Practices standard, as Starbucks exerts high levels of explicit control and the farmers are captive. So, the upgrading possibilities and the subsequent change in governance structure do not only depend on the organisational capabilities of a cooperative, but also on the type of standard. It can be concluded that voluntary standards probably create the biggest upgrading possibilities for the farmers, as these standards mainly focus on improving the livelihoods of the farmers, whereas private standards also take other factors into account such as making profit.

To conclude, sustainability standards can lead to upgrading possibilities for small-scale farmers. However, without the proper governance structure, upgrading through sustainability standards is impossible, since the organisational structure of a local cooperative should be good in order to reap the benefits of certification. Moreover, the governance structure of the entire chain also influences the upgrading possibilities, because when the lead firm exerts high levels of control, as is the case with CAFÉ Practices, empowerment of farmers and thus the upgrading possibilities are limited. Another impact of sustainability standards is that they create upgrading possibilities, which could create further shifts in governance structure, as farmers become empowered through the standards. It can be concluded that sustainability standards affect both the governance structure and the upgrading of the coffee supply chain, and that these three concepts also depend on and influence each other.

Discussion

One of the major limitations of this research has been the lack of available empirical research done on the impact of CAFÉ Practices, UTZ Certified and 4C. Due to this lack of information on these three standards, it was hard to compare the four standards with each other on their impact. Since this research is a literature study, no empirical research could be done to assess the impact of these three standards. In future studies, it could be interesting to assess the impact of CAFÉ Practices, UTZ Certified and 4C on the economic, environmental and social conditions of small-scale farmers. With this information, a proper comparison of the standards could be made.

Additionally, more research should be done on the 4C standard. In this research it is assumed that the multi-stakeholder approach of the 4C standard decreases the power asymmetry. However, more research should be done to determine whether or not this is the case and to what extent the farmers gain more power. If it indeed decreases the power asymmetry, it would be a very important standard that could possibly change the power relationships in the coffee chain.

Subsequently, most studies on the impact of sustainability standards focussed on economic and social impacts and to a lesser extent on the environmental impact. Therefore, in this research the main focus was also on these two aspects of sustainability. Additionally, due to a lack of time, only the four major sustainability standards have been studied, whereas other standards also might have created interesting results. In an extensive research, more sustainability standards could be compared to review which one creates the best upgrading possibilities.

Finally, it can be questioned how well the five governance types, as described by Gereffi et al., (2005), can be applied to the coffee chain. It turned out to be hard to fit the standards into one single type of governance form, indicating that this might not have been very well applicable to the coffee chain. In future research, other classifications of governance structures could be used that fit the coffee chain better.

References

4C Association, (2009a), 'Our mission & our vision', [online], available at: < http://www.4c-coffeeassociation.org/about-us/mission-and-vision.html >, [Accessed 25 March 2013]

4C Association, (2009b), 'Our members', [online], available at: < http://www.4c-coffeeassociation.org/about-us/our-members.html >, [Accessed 25 March 2013]

4C Association, (2009c), 'Who we are', [online], available at: < http://www.4c-coffeeassociation.org/about-us/who-we-are.html >, [Accessed 25 March 2013]

4C Association, (2009d), 'The 4C code of conduct', [online], available at: < http://www.4c-coffeeassociation.org/our-services/4c-code-of-conduct/standards-setting-procedure.html >, [Accessed 26 March 2013]

4C Association, (2010), 'Understanding the 4C code of conduct: An illustrated guide to the unacceptable practices and 4C Code Principles', [online], available at: < http://www.4c-coffeeassociation.org/uploads/media/4C_Code-of-Conduct_IllustratedGuide_en.pdf >, [Accessed 26 March 2013]

Arnoud, E.J., Plastina, A., Ball, D., (2009), 'Does Fair Trade deliver on its core value proposition? Effects on income, educational attainment, and health in three countries', *Journal of Public Policy & Marketing*, Volume 28, Issue 2, pp. 186-201

Auld, G., (2010), 'Assessing certifications governance: Effects and broader consequences for coffee', *The Journal of Environment Development,* volume 19, issue 2, pp. 215-241

Azevedo, P.F., Silva, V.L.S., (2003), 'Food Franchising and Backward Coordination: An Empirical Analysis of Brazilian Firms', *Journal on Chain and Network Science*, Volume 3, Issue 1, pp. 33-44

Bacon, C., (2005), 'Confronting the Coffee Crisis: Can Fair Trade, Organic, and Specialty Coffees Reduce Small-Scale Farmer Vulnerability in Northern Nicaragua?', *World Development*, Volume 33, Issue 3, pp. 497-511

Barham, B.L., Callenes, M., Lewis, J., Gitter, S., Weber, J., (2011), 'Fair Trade/organic coffee, rural livelihoods, and the "Agrarian Question": Southern Mexican coffee families in transition', *World Development*, Volume 39, Issue 1, pp. 134-145

Bartley, T., (2007), 'Institutional emergence in an era of globalization: the rise of transnational private regulation of labor and environmental conditions', *The American Journal of Sociology*, Volume 13, Issue 2, pp.297-351

Bates, R.H., Lien, D.D., (1985), 'On the operations of the international coffee agreement', *International Organization*, Volume 39, Issue 3, pp. 553-559

Beuchelt, T.D., Zeller, M., (2011), 'Profits and poverty: Certification's troubled link for Nicaragua's organic and fair-trade coffee producers', *Ecological Economics*, Volume 70, Issue 7, pp. 1316-1324

Bitzer, V., Francken, M., Glasbergen, P., (2008), 'Intersectoral partnerships for a sustainable coffee chain: Really addressing sustainability or just picking (coffee) cherries?', *Global Environmental Change*, Volume 18, Issue 2, pp. 271-284

Coffee Barometer 2012, Tropical Commodity Coalition

Conservation International, (2013), 'Conservation beyond the farm, in your cup', [online], available at: < http://www.conservation.org/campaigns/starbucks/Pages/default.aspx >, [Accessed 24 March 2013]

David, R.J., Han, S.H., (2004), 'A systematic assessment of the empirical support for transaction cost economics', *Strategic Management Journal*, Volume 25, Issue 1, pp. 57-74

Daviron, B., Ponte, S., (2005), *The coffee paradox: global markets, commodity trade and the elusive promise of development*, London, Zed Books

Dudek, D.J., Wiener, J.B., (1996), 'Joint implementation, transaction costs, and climate change', *Organisation for Economic Co-operation and Development,* Volume 96

Fairtrade International, (2013a), *'Certifying Fairtrade'*, [online], available at:
< http://www.fairtrade.net/certifying_fairtrade.html > [Accessed 21 March 2013]

Fairtrade International, (2013b), *Annual Report 2011-2012*

Fairtrade International, (2013c), *'Aims of Fairtrade standards'*, [online], available at:
< http://www.fairtrade.net/aims_of_fairtrade_standards.html > , [Accessed 21 March 2013]

Fairtrade International, (2013d), *'Coffee'*, [online], available at:
< http://www.fairtrade.net/coffee.html >, [Accessed 21 March 2013]

Fair Trade Original, (2012), '*Wat is fair trade?*' [online], available at:
<http://fairtrade.nl/NL/MainExtendedContent/Wegwijs-in-fairtrade/Definitie.aspx > [Accessed 21 March 2013]

Fawcett, S.E., Ellram, L.M., Ogden, J.A., (2007), *Supply chain management – from vision to implementation*, New Jersey, Pearson Education

Gereffi, G., (1994), '*Commodity chains and global capitalism*', Praeger, London

Gereffi, G., Garcia-Johnson, R., Sasser, E., (2001), 'The NGO-industrial complex', *Foreign Policy*, Number 125 (Jul. - Aug.), pp. 56-65

Gereffi, G., Humphrey, T., Sturgeon, T., (2005), 'The governance of global value chains', *Review of International Political Economy*, Volume 12, Issue 1, pp. 78-104

Giovannuccia, D. Ponte, S., (2005), 'Standards as a new form of social contract? Sustainability initiatives in the coffee industry', *Food Policy*, Volume 30, Issue 3, pages 284-301

Giovannucci, D., Potts, J., (2008), '*Seeking sustainability: COSA preliminary analysis of sustainability initiatives in the coffee sector*', Winnipeg, Canada, Committee on Sustainability Assessment

Henson, S., (2008), 'The role of public and private standards in regulating international food markets', *Journal of International Agricultural Trade and Development*, Volume 4, Issue 1, pages 63 – 81

Henson, S., Reardon, T., (2005), 'Private agri-food standards: Implications for food policy and the agri-food system', *Food Policy*, Volume 30 Issue 3, pages 241 – 253

Humphrey, J., Schmitz, H., (2000), '*Governance and upgrading: linking industrial cluster and global value chain research*', Institute of Development Studies*,* Working Paper 120

IISD, IIED, (2010), '*The State of Sustainability Initiatives Review 2010: Sustainability and Transparency*', International Institute for Sustainable Development and the International Institute for Environment and Development

International Coffee Organisation, (2013), 'Coffee prices', [online], available at: < http://www.ico.org/coffee_prices.asp >, [Accessed 3 April 2013]

Jena, P.R., Chichaibelu, B.B., Stellmacher, T., Grote, U, (2012), 'The impact of coffee certification on small-scale producers' livelihoods: a case study from the Jimma Zone, Ethiopia', *Agricultural Economics*, Volume 43, Issue 4, pp. 429–440

Kaplinsky, R., (2000), 'Globalisation and unequalisation: what can be learned from value chain analysis?'*, Journal of Development Studies*, Volume 37, Issue 2, pages 117‑146

Kolk, A., (2005), 'Corporate social responsibility in the coffee sector: the dynamics of MNC responses and code development', *European Management Journal*, Volume 23, Issue 2, pp. 228-236

Lee, H., Lee, C.Y., (2007), '*Building supply chain excellence in emerging economies'*, New York, Springer

Levy, D., (2008), 'Political contestation in global production networks', *Academy of Management Review*, Volume 33, Issue 4, pp. 943-963

Macdonald, K., (2007), 'Globalising Justice within Coffee Supply Chains? Fair Trade, Starbucks and the Transformation of Supply Chain Governance', *Third World Quarterly*, Volume 28, Issue 4, pp. 793-812

Manning, S., Boons, F., Von Hagen, O., Reinecke, J., (2012), 'National contexts matter: the co-evolution of sustainability standards in global value chains', *Ecological Economics*, Volume 83, pp. 197-209

Manning, S., Von Hagen, O., (2010), 'Linking local experiments to global standards: How project networks promote global institution-building', *Scandinavian Journal of Management*, Volume 26, Issue 4, pp. 398-416

Mendez, V.E., Bacon, C.M., Olson, M., Petchers, S., Herrador, D., Carranza, C., Trujill, L., Guadarrama-Zugasti, C., Cordo, A., Mendoza, A., (2010), 'Effects of organic and Fair Trade certifications on small-scale coffee farmer households in Central America and Mexico', *Renewable Agriculture and Food Systems*, Volume 25, Issue 3, pp. 236‑251

Muradian, R., Pelupessy, W., (2005), 'Governing the coffee chain: The role of voluntary regulatory Systems', *World Development*, Volume 33, Issue 12, pages 2029‑2044

Murray, D.L., Raynolds, L.T., Taylor, P.L., (2006), 'The future of Fair Trade coffee: dilemmas facing Latin America's small-scale producers', *Development in Practice*, Volume 16, Issue 2, pp. 179-192

Neilson, J., (2008), 'Global private regulation and value-chain restructuring in Indonesian smallholder coffee systems', *World Development*, Volume 36, Issue 9, pp. 1607-1622

Neilson, J., Pritchard, B., (2007), 'Green coffee? The contradictions of global sustainability initiatives from an Indian perspective', *Development Policy Review*, Volume 25, Issue 3, pp. 311-331

Pichop, G.N., Kemegue, F.M., (2006), 'International coffee agreement: incomplete membership and instability of the cooperative game', *Southwest Business and Economics Journal*, Volume 14, pp. 25-38

Ponte, S., (2002), 'The 'latte revolution'? Regulation, markets and consumption in the global coffee chain', *World Development*, Volume 30, pp. 1099-1122

Ponte, S., (2004), *'Standards and Sustainability in the Coffee Sector; A Global Value Chain Approach'*, International Institute for Sustainable Development

Ponte, S., Gibbon, P., (2005), 'Quality standards, conventions and the governance of global value chains', *Economy and Society*, Volume 34, Issue 1, pp. 1-31

Raynolds, L.T., (2000), 'Re-embedding global agriculture: The international organic and fair trade movements', *Agriculture and Human Values*, Volume 17, pp. 297-309

Reardon, T., Codron, J.M., Busch, L., Bingen, J., Harris, C., (2001), ´Global change in argifood grades and standards: agribusiness strategic responses in developing countries', *International Food and Agribusiness Management*, Volume 2, Issue 3, pp. 421-435

Renard, M., (2010), 'In the name of conservation: CAFÉ Practices and Fair Trade in Mexcio', *Journal of Business Ethics*, Volume 92, pp. 287-299

Ruben R., Zuniga, G., (2011), 'How standards compete: comparative impact of coffee certification schemes in Northern Nicaragua', *Supply Chain Management: An International Journal*, Volume 16 Issue 2, pages 98 - 109

Starbucks, (2013a), 'Goals & Progress: Ethical Sourcing', [online], available at: <http://www.starbucks.com/responsibility/global-report/ethical-sourcing >, [Accessed at 24 March 2013]

Starbucks, (2013b), 'Ethical Sourcing factsheet', [online], available at: < http://globalassets.starbucks.com/assets/6e52b26a7602471dbff32c9e66e685e3.pdf >, [Accessed 24 March 2013]

Starbucks, (2013c), 'Responsibly grown coffee', [online], available at: < http://www.starbucks.com/responsibility/sourcing/coffee >, [Accessed 24 March 2013]

Starbucks, (2013d), 'Goals & Progress: Coffee purchasing', [online], available at: < http://www.starbucks.com/responsibility/global-report/ethical-sourcing/coffee-purchasing > [Accessed 24 March 2013]

Starbucks, (2013e), 'Supporting farmers and their communities', [online], available at: < http://www.starbucks.com/responsibility/sourcing/farmer-support > [Accessed 24 March 2013]

Taylor, P.L., Murray, D.L., Raynolds, L.T., (2005), 'Keeping trade fair: Governance challenges in the Fair Trade coffee initiative', *Sustainable Development*, volume 13, Issue 3, pp. 199-208

Trienekens, J.H., (2011), 'Agricultural value chains in developing countries. A framework for analysis', *International Food and Agribusiness Management Review*, Volume 14, Issue 2, pp. 51-82

UTZ Certified, (2013a), 'What is UTZ Certified?', [online], available at:
< https://www.utzcertified.org/en/aboututzcertified/whatisutzcertified >, [Accessed 26 March 2013]

UTZ Certified, (2013b), 'Here's how UTZ works', [online], available at:
< https://www.utzcertified.org/en/aboututzcertified/how-utz-works >, [Accessed 26 March 2013]

Valkila, J., (2009), 'Fair Trade organic coffee production in Nicaragua - Sustainable development or a poverty trap?', *Ecological Economics*, Volume 68, Issue 12, pp. 3018-3025

Van Dijk, M.P., Trienekens, J., (2012), *Global Value Chains, linking local producers from developing countries to international markets*, Amsterdam, Amsterdam University Press

Williamson, O.E., (1999), 'Strategy research: Governance and competence perspectives', *Strategic Management Journal*, Volume 20, Issue 12, pp. 1087-1108

Yakovleva, N., Sarkis, J., Sloan, T., (2012), 'Sustainable benchmarking of supply chains: the case of the food industry', *International Journal of Production Research*, Volume 50, Issue 5