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485 Report by Pio Baake, Jana Friedrichsen, and Helene Naegle

Social sustainability labels: promises and reality in the example of Fairtrade-coffee

- Fairtrade-certified coffee is marketed as a premium product
- In the absence of barriers to entry, too many cooperatives are certified, which reduces the income effect of Fairtrade

LEGAL AND EDITORIAL DETAILS



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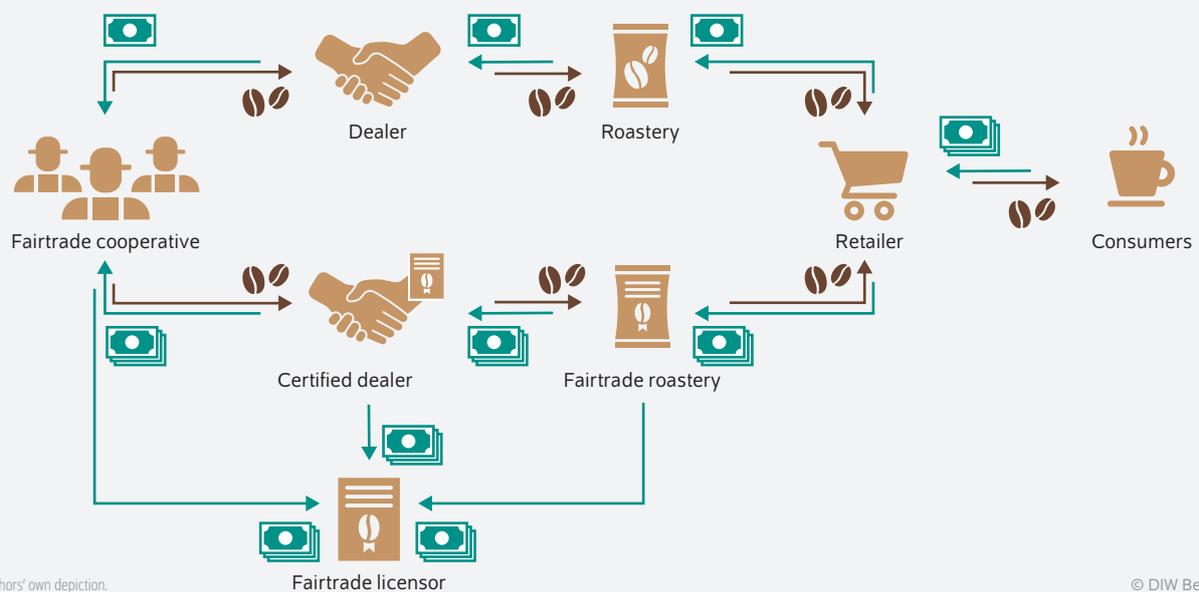
AT A GLANCE

Social sustainability labels: promises and reality in the example of Fairtrade-coffee

By Pio Baake, Jana Friedrichsen, and Helene Naegele

- Fairtrade labels inform consumers that coffee producers are remunerated above market prices
- Consumers are willing to pay more to increase revenue and improve the living conditions of producers
- Roasters and retailers can use Fairtrade labeling to further segment the coffee market
- In the absence of barriers to entry, too many cooperatives get certified and each can sell only a small portion of its production as Fairtrade coffee
- Empirical studies find almost no positive effect on producers' revenue and some effects on social indicators

The coffee value chain: from the cooperative to the coffee cup



Source: Authors' own depiction.

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FROM THE AUTHORS

“The problem is that an increasing number of cooperatives are getting certified so that at some point, there will be so many certified cooperatives in the system that each one of them can only market a small part of its production under the Fairtrade label.”

— Helene Naegele, study author —

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ABSTRACT

Fairtrade certification is intended to improve both the income and living conditions of producers, thereby creating more fairness in international trade. However, theoretical considerations and empirical studies show that this goal is only achieved to a limited extent, at least for coffee: Fairtrade certification leads at best to small increases in income for coffee farmers. The results on the reduction of income volatility, payments used to implement social projects, and improved access to credit are also mixed. Fairtrade is a means of market segmentation for roasters and retailers.

The basic idea of Fairtrade as implemented by the Fairtrade Labeling Organization International (FLO) is simple: a guaranteed minimum price and a social premium, combined with social standards, raise and stabilize the income of producers in developing and emerging countries, thereby improving their economic and social situations. An independent company monitors compliance with the requirements and issues the appropriate certifications, thus ensuring consumers of the credibility of Fairtrade certification.¹ Other labels, such as Utz Certified and Rainforest Alliance, advertise using social and environmental sustainability standards (Box). While social sustainability labels now exist for many different products, this study focuses on the coffee market. Coffee, along with cocoa, was one of the first goods to be Fairtrade-certified. Today, it is the Fairtrade product with the highest sales volume, accounting for a share of more than 30 per cent of total Fairtrade sales at consumer prices.²

After briefly discussing research approaches on the willingness of consumers to pay for Fairtrade products, theoretical considerations and empirical evidence will be presented which show that Fairtrade labels achieve the advertised redistribution and income effects to the benefit of coffee farmers to a limited extent.

Consumers pay more for Fairtrade-certified products

Demand for Fairtrade goods: preferences for redistribution

Compared to conventional products, Fairtrade products combine the purchase of the actual goods with a donation for the producers.³ If consumers perceive such a donation positively

¹ For details on the principles and conditions of Fairtrade, see the box as well as <http://www.fairtrade.de/index.php/mlD/1.1/lan/de> (in German).

² This applies not only to the Fairtrade system but also to figures provided by Forum Fairer Handel e.V., which contains information from recognized fair trade import organizations such as Naturland Zeichen GmbH, Ecocert IMOSwiss AG, and TransFair e.V.: Forum Fairer Handel e.V., *Aktuelle Entwicklungen im Fairen Handel* (2018) (in German; available online; accessed November 20, 2018; this applies to all other online sources in this report unless stated otherwise).

³ Cf. David Reinstein and Joon Song, "Efficient consumer altruism and fair trade products," *Journal of Economics & Management Strategy* 21, no. 1 (2012): 213–241.

Box

Fairtrade labels and other sustainability labels explained

The most important sustainability labels in the coffee market are Fairtrade, Utz Certified, and Rainforest Alliance (RA). Today's Fairtrade label has its roots in the Dutch organization *Stichting Max Havelaar Netherlands*, founded in 1988. Based on their example, other national Fairtrade organizations were founded, such as TransFair in Germany. The national organizations joined together under the umbrella organization Fairtrade Labeling Organisation International (FLO) in 1997 and have used a common label since 2003.

In January 2018, Utz and RA joined forces to form a single organization. They set standards for social sustainability and eco-friendliness which are audited by independent certification companies. Farmers who pass this audit may sell their coffee with the respective label.

The FLO defines a similar standard catalogue but adds a minimum price and a social premium: if the world market price is below the minimum price, Fairtrade-certified farmers receive the *minimum price* plus the premium; if the world market price is above the minimum price, they receive the *world market price* plus the premium (Figure). The premium is meant to be invested in social projects and development. Utz and RA argue that farmers also earn a price premium with their label, but this is not guaranteed.

For the three labels, the farm certification is carried out by an organization other than the one setting the production standards. While the standards are set by NGOs, the certifiers are typically companies. FLO works exclusively with FLO-Cert GmbH, which also offers Utz and RA certification. A further unique selling point of Fairtrade is that the organization in the coffee sector only works with democratically organized cooperatives of small-scale farmers—coffee plantations with employees are excluded from the Fairtrade label. None of the label organizations sell coffee themselves or offer purchase guarantees.

Currently, the FLO minimum price for conventional, washed Arabica coffee is 1.40 USD per pound. The premium is 0.20 USD per pound, part of which is invested in measures to increase productivity and quality. The figure shows that until 2007, the Fairtrade minimum price was mostly higher than the world market price and led to a large price difference between conventional and Fairtrade-certified coffee. Since 2007, the world market price has only occasionally been below the Fairtrade minimum price. This can be understood above all as an insurance for farmers against low market prices.

Figure

Coffee price development since 1989
In US dollars per pound of coffee (nominal)



Source: investing.com (for US Coffee C Futures); www.fairtrade.net (FLO minimum price for washed, non-organic, certified Arabica coffee).

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The Fairtrade minimum price was often lower than the market price in recent years.

The rise of the Fairtrade label should be viewed in the context of the end of the Cold War. The International Coffee Agreement (ICA), which had stabilized coffee prices at a high level, ended with the war. Without the ICA, prices fell dramatically. Gradually, information about coffee producers, whose incomes were often below the subsistence level, became public. In addition, the Fairtrade labels began to work not only with Fairtrade and "world shops," but also with large roasters and supermarkets. Although coffee prices have recovered to ICA levels since 2006/2007, sales of Fairtrade products continue to grow at double-digit annual rates. The market share of Fairtrade coffee in German supermarkets was 1.5 percent in 2010.¹

¹ Anna Lu, "Inference of Consumer Consideration Sets," *DIW Berlin Discussion Paper No. 1681* (2017) (available online).

due to views on fairness or prosocial attitudes, they are also prepared to pay higher prices than for conventional products.⁴

A further explanation for the success of Fairtrade products is that they allow consumers to send a positive signal about their interest in the well-being of coffee farmers and thus their prosocial attitude; such a signal lends the product additional symbolic value.⁵

Even if consumers are on average willing to pay a higher price for Fairtrade goods, the willingness of the population to support Fairtrade through higher prices varies greatly.⁶ This could be due to differences in prosocial preferences, the need to distinguish oneself by a purchase, or financial situations. Moreover, consumers have differing views on the necessity and effectiveness of the Fairtrade system.

Sustainability labels as a means of market segmentation

The Fairtrade label enables companies (in the case of coffee, roasters and retailers) to differentiate products in an ethical dimension. Products associated with higher incomes for farmers in developing and emerging countries are generally seen as superior. Fairtrade coffee is therefore a premium product which can be used by companies to benefit from prosocial consumers' willingness to pay higher prices. If strongly prosocial consumers react less to price increases for Fairtrade products, there is an incentive for companies to charge high surcharges for these products.⁷ The price difference between conventional and Fairtrade-certified coffee is generally much greater for the end consumer than the income difference for coffee farmers.

Additionally, such certification leads to market segmentation as well as a reduction in competition intensity, which can lead to various product line constellations.⁸ If competition between brands is intense, Fairtrade certification can lead to a partitioning of the market, with only one or very few roasters offering Fairtrade coffee. With less intense competition, it is worthwhile for more roasters to offer Fairtrade coffee. Such a product line constellation exists on the German coffee market: almost all large roasters offer conventional (non-certified) as well as Fairtrade coffee. In such an oligopolistic market, the expected price difference between conventional

and Fairtrade products for consumers is generally larger than the premium paid to farmers, because ethical differentiation reduces competitive pressure between products and increases profit margins.

Small impact on farmer incomes

Theoretical considerations

To understand how the Fairtrade system affects the income of farmers and their cooperatives, it is important to note that Fairtrade certification does not include a purchase guarantee: the FLO-Cert only issues label licenses; they do not act as a buyer for the cooperatives. The additional income a cooperative earns through Fairtrade certification results from the social premium, the difference between the guaranteed minimum and market price and the quantity that it can actually sell within the Fairtrade system. If the market price is above the minimum price, the additional revenue is limited to the social premium. In addition, there are annual certification costs, usually independent of the quantity sold.⁹

The number of cooperatives which can become Fairtrade-certified is unlimited in theory. The decision to become Fairtrade-certified lies with the individual cooperative. Acquiring certification is worthwhile as long as the cooperative's expected additional income exceeds the certification costs. However, the larger the number of Fairtrade-certified cooperatives, the greater the supply of potentially certified coffee and the smaller the quantity that each individual cooperative can sell at Fairtrade prices.¹⁰ With every new certified cooperative, the expected additional income from the sale of Fairtrade-certified coffee sinks. In the end, it is not worthwhile for any cooperatives not previously certified to become certified: the expected Fairtrade income is lower than the certification costs.¹¹ Therefore, if the cooperatives are similar in terms of their expected additional revenues, none of them will benefit from the Fairtrade label and certification. Only cooperatives that sell an above-average proportion of their production under the Fairtrade label can profit from certification. Other cooperatives will continue to gain little or nothing from certification or perform even worse in case of unfavorable harvest results or other shocks.

This result remains valid even if requirements are taken into account that oblige traders to establish long-term relationships with the cooperatives. If long-term contracts reduce the risk of income fluctuations, the number of certified

⁴ See for example Patrick De Pelsmacker, Liesbeth Driesen, and Glenn Rayp, "Do consumers care about ethics? Willingness to pay for fair-trade coffee," *Journal of Consumer Affairs* 39, no. 2 (2005): 363–385; Maria Loureiro and Justus Lotade, "Do fair trade and eco-labels in coffee wake up the consumer conscience?" *Ecological Economics* 53, no. 1 (2005): 129–138.

⁵ Cf. Jens Beckert, "Was unsere Güter wertvoll macht," *Handelsblatt*, November 19, 2010 (in German); Jana Friedrichsen and Dirk Engelmann (2018): Who cares about social image? *European Economic Review* 110 (November 2018), 61–77; see also Jana Friedrichsen, "Shopping for a better world' funktioniert nur bedingt," *DIW Wochenbericht*, no. 38 (2016): 851–856 (in German; available online, accessed November 15, 2018).

⁶ This is shown by a field study conducted in several US states: Jens Hainmueller, Michael Hiscox, Sandra Sequeira, "Consumer Demand for Fair Trade: Evidence from a Multi-Store Field Experiment," *Review of Economics and Statistics* 97, no. 2 (2015): 242–256.

⁷ Hiscox, Hainmueller, and Sequeira, "Consumer Demand for Fair Trade."

⁸ For a detailed discussion see Pio Paake and Helene Naegele, "Competition between For-Profit and Industry Labels: The case of Social Labels in the Coffee Market," *DIW Discussion Paper* No. 1686 (available online).

⁹ The certification costs primarily depend on the number of cooperative members. In 2015, for example, a small cooperative (fewer than 50 coffee farmers) initially paid 1,466 euros for the certification and then 1,199 euros annually; FLOCERT, *Fee system small producer organization. Version 26* (2015).

¹⁰ Coffee can only be marketed as Fairtrade to end consumers if all players in the trade chain are certified in the Fairtrade system. In 2012, approximately 30 percent of certified cooperatives' production with the Fairtrade label was sold worldwide. A large part of certified coffee is sold as conventional coffee. See Jason Potts et al., *The state of sustainability initiatives review 2014: Standards and the green economy* (Winnipeg, MB: International Institute for Sustainable Development): 2014.

¹¹ Cf. Alain de Janvry, Craig McIntosh, and Elisabeth Sadoulet, "Fair Trade and Free Entry: Can a Disequilibrium Market Serve as a Development Tool?" *Review of Economics and Statistics* 97, no. 3 (2015): 567–573.

cooperatives increases in equilibrium and the share of their production that they can sell under the Fairtrade label decreases. The previous result still holds so that no other cooperative can perform better by becoming Fairtrade-certified. Analogous considerations apply to implementing social projects. If cooperatives profit from these projects, they can be interpreted as additional revenue.¹² In theory, there is no change in the decision to become certified.

Empirical evidence

Numerous empirical studies assess the impact of Fairtrade on small farmers.¹³ Aside from the effects on income, additional aspects, such as productivity, education, or credit access, are analyzed. Table 1 provides an overview of the effects of Fairtrade certification on the income of coffee farmers. The results are mixed, but they often do not find an overall positive effect on income.

Certification costs are not considered in most studies, whereas Alain de Janvry, Craig McIntosh, and Elisabeth Sadoulet attach central importance to this aspect.¹⁴ They test the following hypotheses: a) the benefit of participating in the Fairtrade system is negative in periods when the world market price is higher than the price guaranteed by Fairtrade, and b) the long-term benefit of participating in Fairtrade is zero because the certification costs offset the additional profits. Their empirical study on Central American coffee cooperatives between 1997 and 2009 confirms both hypotheses. In their sample, certified coffee farmers sell an average of 22 percent of their production with the Fairtrade label. This share correlates positively with world market prices.¹⁵

In addition to increased income, price stability is a central argument in favor of the Fairtrade system. As the price cannot fall below the Fairtrade minimum price, price volatility is automatically limited. However, the authors argue that volume volatility destroys part of this price stability: in years with low world market prices, Fairtrade coffee is relatively expensive and sales volumes are lower.

Unlike organic certification, Fairtrade certification hardly has any effect on the specific production conditions. As a consequence, even members of certified cooperatives¹⁶ often do

Table 1

Studies on income effects of coffee Fairtrade certification

Authors	Country, year	Criterion	Effect	Note
Chiputwa et al. (2015) ¹	Uganda, 2012	Income	Significantly positive	Higher part of the value added in the cooperative via further processing of own products as explanation
Ruben and Fort (2012) ²	Peru, 2007/2008	Income	Not significant	Market price higher than minimum price, small quantities sold as Fairtrade
Beuchelt, Zeller (2011) ³	Nicaragua, 1997 vs. 2007	Poverty line	Increased poverty among certified farmers	
Van Rijsbergen et al. (2016) ⁴	Central Kenya, 2009–2013	Overall income (coffee and other income sources)	Significantly negative	Little diversification among certified farmers
Valkila and Nygren (2010) ⁵	Nicaragua, 2005/2006	Income volatility	Lower for Fairtrade farmers	

1 Brian Chiputwa, David Spielman, and Matin Qaim, "Food Standards, Certification, and Poverty among Coffee Farmers in Uganda," *World Development* 66 (2015): 400–412.

2 Rued Ruben and Ricardo Fort, "The Impact of Fair Trade Certification for Coffee Farmers in Peru," *World Development* 40, no. 3 (2012): 570–582.

3 Tina Beuchelt and Manfred Zeller, "Profits and poverty: Certification's troubled link for Nicaragua's organic and fairtrade coffee producers," *Ecological Economics* 70, no. 7 (2011): 1316–1324.

4 Bart van Rijsbergen et al., "The Ambivalent Impact of Coffee Certification on Farmers' Welfare: A Matched Panel Approach for Cooperatives in Central Kenya," *World Development* 77 C (2016): 277–292 (available online).

5 Joni Valkila and Anja Nygren, "Impacts of Fair Trade certification on coffee farmers, cooperatives, and laborers in Nicaragua," *Agriculture and Human Values* 27, no. 3 (2010): 321–333.

Source: Own compilation.

not know that they are selling Fairtrade coffee or how the Fairtrade system functions.¹⁷

The mixed results on aspects other than income are summarized in Table 2. Among other things, certification should enable coffee farmers to take over a larger part of the value chain within the cooperative and thus increase profits. This effect is underlined by several theoretical studies on Fairtrade,¹⁸ but is not always empirically verifiable.

Conclusion: Fairtrade labels do not have the desired effects, other models should be considered

Theoretical considerations and empirical evidence make it clear: the simple idea that minimum prices lead to higher income for coffee farmers does not readily work. Without limiting access to the Fairtrade system, potential income gains are eliminated by the oversupply of Fairtrade-certifiable production. Higher revenues in times when the minimum price is above the market price are offset by certification costs and associated losses in times of high market prices. The positive effects of the Fairtrade system do not result from the minimum price but rather from regulations that lead to the implementation of social projects, the long-term development of supply relationships, and improved access to credit.

12 The earmarking of the social premium can be efficient, as it can help to overcome coordination and free rider problems when financing public infrastructure, schools, or other social projects.

13 Comprehensive overviews are available in Carlos Oya et al., "Effects of certification schemes for agricultural production on socio-economic outcomes in low- and middle-income countries: a systematic review," *Campbell Systematic Review* 2017:3 (2017); as well as Valerie Nelson and Barry Pound, *The Last Ten Years: A comprehensive review of the literature on the impact of Fair Trade* (Greenwich: Natural Resource Institute (NRI), 2009).

14 de Janvry, McIntosh, and Sadoulet, "Fair Trade and Free Entry."

15 In the data from Valkila et al., Fairtrade-certified Nicaraguan cooperatives sell 30 to 60 percent of their production with the label; Dragusanu and Nunn report that the shares in four cooperatives interviewed in Costa Rica are between ten and 80 percent. Cf. Joni Valkila, Pertti Haaparanta, and Niina Niemi, "Empowering coffee traders? The coffee value chain from Nicaraguan fair trade farmers to Finnish consumers," *Journal of Business Ethics* 97, no. 2 (2010): 257–270; Raluca Dragusanu, Daniele Giovannucci, and Nathan Nunn, "The Economics of Fair Trade," *Journal of Economic Perspectives* 28, no. 3 (2014): 217–236.

16 Certification takes place on a cooperative level; individual coffee farmers are not individually certified.

17 Cf. Silje Johanessen and Harold Wilhite, "Who really benefits from Fairtrade? An analysis of value distribution in Fairtrade coffee," *Globalizations* 7, no. 4 (2010): 525–544; Valkila and Nygren, "Impacts of Fair Trade Certification."

18 Cf. Claire Chambolle and Sylvaine Poret, "When fairtrade contracts for some are profitable for others," *European Review of Agricultural Economics* 40, no. 5 (2013): 835–871; as well as Martin Richardson and Frank Stähler, "Fair Trade," *Economic Record* 291 (2014): 447–461.

Table 2

Studies about the social effects of coffee Fairtrade certification

Authors	Country	Criterion	Effect	Note
Dragusanu and Nunn (2018) ¹	Costa Rica	Education	Positive	Effect not only limited to the children of certified farmers
Gitter et al. (2012) ²	Mexico	Education	Positive for girls	
Minten et al. (2018) ³	Ethiopia	Child labor	No effect	Ca. 30 percent use child labor
Van Rijsbergen et al. (2016)	Kenya	Further processing of own products	No effect	
Ruben and Fort (2012)	Peru	Credit	Improved access	
Van Rijsbergen et al. (2016)	Kenya	Credit	No effect	
Valkila and Nygren (2010)	Nicaragua	Credit	Worse interest rate on average	Fairtrade cooperatives between 18 and 22 percent, others average at 11 percent

1 Raluca Dragusanu and Nathan Nunn, "The Effects of Fairtrade Certification: Evidence from Coffee Producers in Costa Rica," Working Paper No. 2460, National Bureau of Economic Research, 2018.
 2 Seth Gitter et al., "Fair trade-organic coffee cooperatives, migration, and secondary schooling in Southern Mexico," *Journal of Development Studies* 48, no. 3 (2012): 445–463.
 3 Bart Minten et al., "Tracking the quality premium of certified coffee: evidence from Ethiopia," *World Development* 101 (2018): 119–132.

Source: Own compilation.

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Here too, however, the results of empirical studies are not entirely positive.

The proposed exemption of Fairtrade-certified coffee from the coffee tax—which is roughly two euros per kilo in Germany—would possibly increase demand without solving the fundamental problems of the current Fairtrade system.

The design of more effective alternatives to the Fairtrade system cannot be conclusively answered here. Access restrictions, such as those that exist in direct trade systems with direct negotiations between farmers and roasters/retailers, can improve the situation of the farmers and cooperatives involved but have a discriminatory effect on those who are still dependent on conventional distribution channels. Sustainable structural changes are more likely to be achieved through technical support and changes in the value chain. Research¹⁹ shows that quality improvements achieved through technical assistance can lead to higher premiums than under the Fairtrade label. The importance of the value chain becomes clear in other studies. By processing their own products, cooperatives in developing and emerging countries can also secure a larger share of the total value added.²⁰

¹⁹ Bradley Parrish, Valerie Luzadis, and William R. Bentley, "What Tanzania's coffee farmers can teach the world: a performance-based look at the fair trade–free trade debate," *Sustainable Development* 13, no. 3 (2005): 177–189.

²⁰ Chiputwa, Spielman, and Qaim, "Food Standards, Certification, and Poverty."

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