

How effective is Fair Trade as a tool for the stabilization of agricultural commodity markets?

Case of coffee in the Czech Republic

JIRÍ HEJKRLÍK, JANA MAZANCOVÁ, KAROLÍNA FOREJTOVÁ

Faculty of Tropical AgriSciences, Czech University of Life Sciences Prague, Prague, Czech Republic

Abstract: Fair Trade is one of the leading systems of the Corporate Social Responsibility and a price stabilization mechanism for producers in developing countries. It is being practiced by more and more Czech importers and manufacturers of the tropical agricultural commodities. Coffee represents the highest market share. However, a higher final retail price functions as a strong inhibitor of the dynamic market growth. The article uses the linear static model applied to various consumer-perceived factors influencing the retail price of the conventional, organic and Fair Trade coffee available in the Czech Republic. The quantitative research is supported by the questionnaire for the analysis of the attitude of regular Fair Trade buyers towards the perceived quality and price expectations of the Fair Trade coffee. Even after the stratification of the coffee market into low and high market products and brands, the Fair Trade quality shows a very strong influence on the final retail price. The efficiency of Fair Trade expressed in terms of the ratio of the price premium paid by the consumer and the price premium received by the producer is in the current stage of the Fair Trade market questionable.

Key words: organic, efficiency, fairtrade premium, commodity

The Fair Trade¹ in the Czech Republic gradually moves from an alternative movement practiced by few enthusiasts into the mainstream business. Fair Trade agricultural products like coffee, tea, sugar or cocoa were introduced for the first time in 2004 and by now they are sold by the majority of the leading supermarket chains. Besides that, a vast range of the Fair Trade products represents a regular offer available in different coffees, groceries, specialized organic shops and the on-line retail. There are 10 specialized shops in bigger cities selling exclusively the Fair Trade products (World Shops).

The main claim of the companies and organizations supporting Fair Trade is that the system serves as a market-based tool for improving trading conditions of small producers in the global South (Nicholls and Opal 2005, p. 27). It is an institutionalized and voluntary form of good business practices among producers in the South and their trading partners in the North.

The common assertion is that Fair Trade helps the marginalized producers through guaranteed minimum prices, access to pre-financing and market information, providing social premium for the community development, encouraging the institutional capacity building and direct trade between the producer and importer (Utting 2009; FLO 2012b). Like that, the Fair Trade represents one of the tools of international development and global solidarity.

Besides being a development tool aiming at improved trading conditions for the producers in the South, there are already several attempts to introduce the Fair Trade practices for disadvantage agricultural producers in developed countries as well. The most recent example is the European Dairy Milk Initiative – Fair Milk (European Milk Board 2011).

As the Fair Trade products market share and the consumer recognition grow in majority of the developed countries, its actual impact and potential

The research was conducted in the framework of internal grant of the Institute of Tropics and Subtropics, Czech University of Life Sciences Prague (Project No. 51140/1312/513114).

¹Fair Trade in this article refers to the broader view of the whole international movement aiming at the support of disadvantaged small producers in the South through introduction of alternative trade rules. The Fair Trade sourcing of products is monitored by the WFTO (World Fair Trade Organization). While Fairtrade refers to the system of standards setting, monitoring and certification according to the ISO 65 standard practiced by the Fairtrade Labelling Organizations International e.V. and its subsidiary organization FLO-Cert GmbH.

has become an increasingly discussed topic. Several academics and journalists present their worries regarding the movement's actual capacity to improve the livelihood of poor people. The most serious concerns of the Fair Trade opponents relate to the excess of supply through the mechanism of artificially higher prices (The Economists 2006; Wilson 2006; Sidwell 2007), the impact on non-participating producers (for discussion on this topic, see Konečný and Mysliveček 2008), the ineffectiveness of the Fair Trade premium to reach the producers and to bring the needed changes of the production structures (Weitzman 2006; Sidwell 2007), unfair marketing practices and the claims of the Fair Trade activists and the uncertain nature of the Fair Trade demand (Weber 2007; Mohan 2010).

This paper aims to address one of the most frequent concerns, namely the effectiveness of Fair Trade in terms of matching the higher premiums that the consumer has to pay for the products with the direct financial benefits for the producers. The evidence shows that the price difference remains one of the main factors that many consumers regard as the biggest obstacle for a deeper penetration of Fair Trade into the Czech market.

In particular, the article aims to answer the questions: What is the premium being paid by the ethically-responsible Czech consumer and what difference does the premium bring for the producer?

Responsible consumerism in the Czech Republic

Several studies document how the general questioning of agro-industrial practices and values has promoted the rise of the alternative agro-food networks based on the ecological, social and locality specific production-consumption relations associated with the organic agriculture, Fair Trade, local food and other alternative values and qualities (for review see Reynolds 2002). There is a recent global trend of re-linking the consumer with producers in all of these alternative frameworks. The trend shifts emphasis from the commodity quality, standardization and price in organizing different commodity networks. The commodity approach has been one of the leading theoretical frameworks for the related field of studies. For Buttel (2001), the commodity approach is one of the most important directions of the current agrarian political economy. Murdoch et al. (2000) summarize five possible qualities in agricultural commodity chains: (1) commercial conventions,

based on price; (2) industrial conventions, based on efficiency and reliability linked to formal testing and standards; (3) domestic conventions, based on trust and drawing on attachments to place and tradition; (4) public conventions, based on well recognized trademarks and brands; and (5) civic conventions, based on evaluations of general societal and environmental benefit.

Fair Trade attempts to reconnect producers and consumers economically, politically, and psychologically through the creation of a transnational moral economy (Goodman 2004). In creating relations based on 'trust', 'respect' and 'partnership', Fair Trade networks extend the domestic qualifications globally. Fair Trade groups draw on the Northern consumers' attachment to far off places and traditions, joining products with information regarding the people, places, and cultures engaged in the production of the particular commodities. The Fair Trade concept builds on the ideas of global citizenship. Marsden et al. (2000, p. 425) in Reynolds (2002) suggest: "it is not the number of times a product is handled or the distance over which it is ultimately transported which is necessarily critical, but the fact that the product reaches the consumer embedded with information... It is this which enables the consumer to confidently make connections and associations with the place/space of production and, potentially, the values of the people involved and the production methods employed".

The world market for Fairtrade products is currently valued at 3.4 billion EUR² (FLO 2009). The market penetration is the highest in Switzerland with 55% of Fairtrade bananas in the total banana sales and the United Kingdom with 24% of Fairtrade coffee (Krier 2007, pp. 102, 106). Many of the large food producers and distributors, such as Procter & Gamble, Nestlé, Kraft, Sara Lee, Tchibo, Chiquita, Del Monte, Dole, Ben and Jerry's, Cadbury, Starbucks and Costa, have also developed the Fair Trade lines (FLO 2009). In December 2006, the British retailer Sainsbury's decided to sell only Fair Trade bananas.

Recently, based on the Western model, Czech consumers have also started to be increasingly concerned about the safety of their food, as well as the environmental and social implications of its production. The first Fair Trade products were introduced in 1994 (Handicraft non-certified products) and since the establishment of the first Fair Trade food wholesaler in 2004, the dynamic increase of the retail value has been impressive. The total retail turnover was 80 million CZK in 2010 (Asociace pro fair trade 2011a).

²Only for the FLO certified Fairtrade products.

The dynamic development of the whole Fair Trade market is portrayed in the Figure 1.

Nevertheless, the organic movement has a leading role in the responsible shopping with the value of the total retail turnover of 1.8 billion CZK in 2008, which is 40% increase compared to 2007 (Potravinářská komora 2010). According to the research done by the STEM/MARK for Ogilvy & Mather (STEM/MARK 2010), 96% of all respondents know the bioproducts and 74% are able to explain that they are products of organic agriculture. 37% consider themselves as regular buyers.

Besides “organic”, the consumers are slowly beginning to truly understand also “Fair Trade” and they demand such products from their retailers. Due to the lower recognition of the Fair Trade products in the Czech Republic, the research of the consumer attitude is still very limited. There are only two such surveys available. According to the survey done by the NMS company and Férová planeta in October 2009, 43% of all respondents are aware of the existence of Fairtrade products, 23% buy them time to time and 3% buy them regularly. The low awareness among consumers, low availability and high price were identified as the main factors limiting higher consumption (Hospodářské noviny 2011). Another survey organized in summer 2010 by the Společnost pro Fair Trade (2011) shows that 63 % of the respondents are interested in the origin of products they buy, 50% regularly support socially and environmentally considerate producers and 37% prefer the products produced in the conditions with a better record of working and human rights. The BIO mark was recognized by 63% respondents and the Fairtrade mark by 16%. Respondents with a higher recognition of the Fairtrade mark were of

higher education (38%), from Prague or cities with more than 100 000 inhabitants (25%) and with the income more than 30 000 CZK (22%). There was a high correlation between buyers of bioproducts and Fairtrade products (21%). The percentage of regular buyers reached 5%.

Fair Trade and the specialty coffee sector in the Czech Republic

Coffee is the most important tropical commodity worldwide. It accounts for nearly one half of total exports of tropical products. According to the International Coffee Organization (ICO 2011a), world consumption in the calendar year 2009 was estimated at 130 million bags, a slight fall of 1.2% compared to 131.7 million bags in 2008.

At the same time, coffee has always been exhibiting the most volatile commodity prices. Therefore, it became emblematic of the problems faced by the developing country exports of agricultural commodities. Against a background of a rapid growth in the global coffee supplies after the collapse of the International Coffee Agreements and the parallelly stagnating demand coupled with a low price elasticity of demand, the prices of all coffees in 2001–2003 fell to their lowest level in more than three decades. In the real terms, they had fallen to less than one third of their level in 1960, undermining the economic sustainability of millions of families in Latin America, Africa and Asia (FAO 2009). The world coffee market started to show the signs of recovery in 2004, but it was only in early 2005 that coffee prices reached their average 1999 level of 0.85 USD per pound. By 2011,

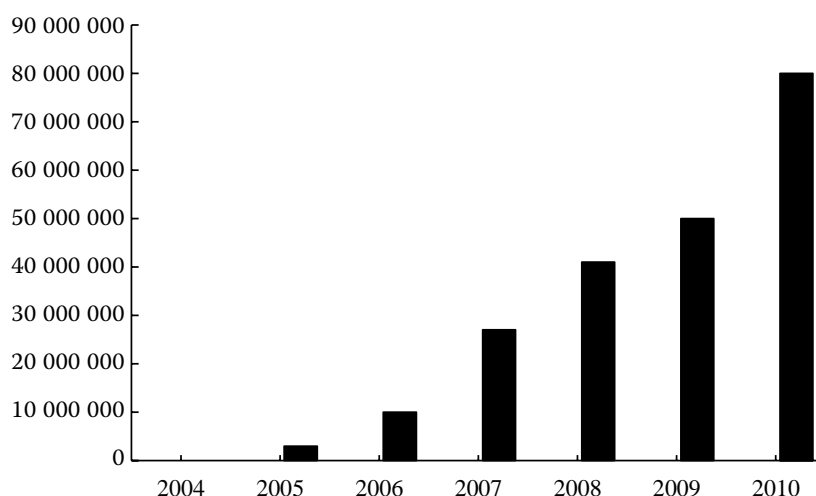


Figure 1. Total retail turnover of Fair Trade products in the Czech Republic in million of CZK

Source: Asociace pro fair trade (2011a)

coffee prices have reached their highest level in more than one decade, reflecting the overall upturn in the agricultural commodity prices which began in 2006 and which by 2011 has escalated into a food price boom. In January 2012, the price stood at 188.9 USD cents per pound (ICO 2012), which indicates the start of decline (Figure 2).

There is a significant difference between the commodity coffee production and the specialty coffee production. The conventional coffee is typically sold as a commodity at the New York Board of Trade. In general, specialty coffees are of a higher grade. Their value lies usually in their unique flavour characteristics and the traceable production, processing and preparation methods. The Specialty Coffee Association of America defines specialty coffee as that which “has no defects and has a distinctive flavour in the cup” (SCAA 2011). Nevertheless, their special production methods or the fact that they are not traded in the commodity exchange as commodities and that the import and export operators must negotiate privately make them unique as well.

Good quality coffee is readily available in the European market. Unlike the United States, where the unsatisfactory quality of the mass-marketed coffee led consumers to turn to specialty coffees in large numbers long time ago, the European specialty segment still consists mainly of the real coffee enthusiasts, looking for something different (FAO 2009).

Nevertheless, with the sales of the conventional coffee stagnating in both Europe as well as the United

States, specialty coffees and the coffee bearing a sustainable certification mark constitute one of the few segments of the coffee market registering sales growth in the recent years (Lewin et al. 2004). In the highly oligopolistic coffee market, smaller roasters and distributors have gained the market share by re-qualifying coffee from a boring bulk commodity to a vibrant specialty item “pre-packaged with lifestyle signifiers” (Dicum and Luttinger 1999).

Coffee is ideally suited for ethical trade: it is consumed in large quantities; its main consumption markets are Europe and the United States, where the demand for sustainable products is growing; and it has structured trade channels (FAO 2009). The growing interest of large retailers in differentiated coffees, including the single origin, organic and Fairtrade certified coffees, as well as the rising number of coffee shops focused on this segment, is likely to stimulate the development of the European specialty coffee market.

Fair Trade coffee falls into the specialty coffee market rather than into the commodity market. While it is generally of a comparable quality, taste and flavour as the commodity-grade coffee, Fair Trade beans are distinguishable by their growing process. The Fair Trade labels differentiate the otherwise similar products in impersonal markets.

Worldwide sales of the Fair Trade certified roasted coffee reached 73 781 tons in 2009, up 12 percent year-on-year, for the total value of 1.3 billion EUR (FLO 2009). 52 percent of the Fairtrade certified coffee sold in 2009 was also certified as organic.

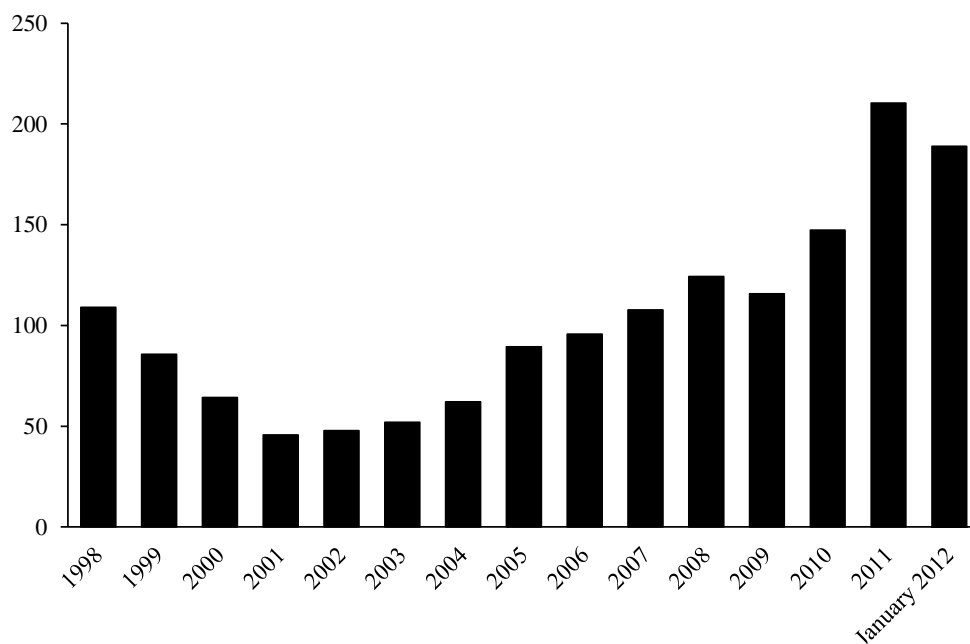


Figure 2. Monthly average ICO composite indicator prices for coffee, 1998–2012 (in USD cents per pound)

Source: ICO (2012)

Table 1. Fairtrade guaranteed minimum prices and Fairtrade social premium for coffee

Product	Product variety	Price level	Fairtrade minimum price	Fairtrade premium
Coffee Arabica	conventional, washed	FOB	1.25	0.1
	organic, washed	FOB	organic differential: +0.20	0.1
	conventional, natural	FOB	1.2	0.1
Coffee Robusta	conventional, washed	FOB	1.05	0.1
	organic, washed	FOB	organic differential: +0.20	0.1
	conventional, natural	FOB	1.01	0.1
	organic, natural	FOB	organic differential: +0.20	0.1

Price applies to USD/1 pound

Source: FLO (2012a)

Coffee was introduced as the first Fairtrade certified product in the Netherlands under the Max Havelaar brand in 1988. Max Havelaar and other national certification schemes were later grouped under the umbrella organization Fairtrade Labelling Organizations International (FLO). Whilst the FLO system is the largest and most widely recognized Fair Trade certification system, other “Fair Trade lite” labelling initiatives – often combining social and environmental criteria – have been developed and they are already present in the Czech Republic, including the Utz Kapeh’s “Utz Certified”-label³, the Rainforest Alliance⁴, the Starbucks’ “C.A.F.E.” label, the Nestle’s “AAA” guidelines, the Rapunzel “Hand in Hand” and the “Common Code for the Coffee Community Association”. There is also a non-certified Fair Trade coffee available in the Czech Republic, where the assurance of the “fair” production and trade is provided by the membership of the producers and importers in the World Fair Trade Organization (WFTO) (Asociace pro Fair Trade 2011b). In this case, only the brand of coffee is a sort of guarantee for the consumer.

To gain access to the Fairtrade label, coffee importers must (1) purchase directly from the FLO approved grower organizations using long term agreements, (2) guarantee at least the FLO minimum price or the world market price if it rises above the minimum (Table 1), (3) pay a social premium for the community development, and (4) offer pre-financing (FLO, 2012b). To be included in the FLO’s registry of the Fairtrade coffee growers, the producers must (1) be small family based producers, (2) be organized into a democratic association, and pursue the ecological goals conserving natural resources (FLO 2011).

Is the Fair Trade effective enough?

Leaving aside the potential external and non-monetary benefits, the Fair Trade claims to guarantee that more money reaches the world’s poor (Nicholls and Opal 2005). It is well documented that the Fairtrade system proved highly effective during the price crisis of the late 1990s-early 2000s. While the world market prices fell to a 30-year bottom of 0.45 USD per pound, the Fairtrade system guaranteed a minimum price that was 180% higher (FAO 2009).

But how efficient is this transfer of wealth when the crisis passes? There are two ways how the Fairtrade increases income for producer: (1) through the guaranteed minimum price (but only in the downturn of the global commodity prices) and (2) through the Fairtrade social premium, which makes approximately 10% of the Fairtrade minimum price. Certainly, the most effective way of the transfer of money is to give somebody money directly, rather than hand extra money to a retailer, who hands some part to the distributor and importer who pays the producer. Every link in the chain takes a margin, leaving less in the hands of the coffee farmer. There is a very limited formal research into this question. The available research shows rather negative results. Stecklow and White (2004) summarized that the Sainsbury’s, a British supermarket, has sold Fairtrade bananas at more than four times the price of the conventional bananas – and more than 16 times what the growers receive. The Tesco PLC in the U.K. recently charged 3.46 USD per pound for the Fairtrade coffee, while the grower gets about 44 cents above the world market price.

In the USA, an extra 20 USD cents per pound paid for the organic Fairtrade bananas would guarantee a

³Initiated by the Ahold group in the Netherlands. In the Czech Republic available in the IKEA or the Albert hypermarket.

⁴Available for example in the McDonald’s fast food stores.

minimum of 5 cents per pound, a return of only 25 per cent to the producer (assuming the social premium 1.75 USD and 0.25 USD Fairtrade minimum price market differential extra) (Nicholls and Opal 2005, p. 51). Mendoza and Bastiaensen (2003) compared returns to the Nicaraguan coffee farmers through the Fair Trade versus the conventional marketing chains with high-prices coffee market consumers paid 1.63 USD per pound extra for the Cafedirect Fair Trade coffee over the Nescafe, but the Nicaraguan coffee farmer saw only 0.03 USD extra, a return of just 2%. Even according to the research done by the OECD (2003), the premiums linked to a better quality may be more valuable than the premiums for the organic or Fairtrade certification.

MATERIAL AND METHODS

In order to evaluate the causal effect of the Fair Trade quality of the product in the retail price, we use several quantitative and qualitative methods, supported by the pilot survey looking into the buyer expectations.

The initial questionnaire was distributed to 140 respondents who are considered as regular Fair Trade buyers in several specialized World Shops with the Fair Trade products. The structured questionnaire consists of 23 closed questions. The main criterion for the relevance of the answered questions was the basic knowledge of the respondents of the Fair Trade system, its aims and the product recognition in retail shops. Its main purpose was to analyze the consumer's expectations in relation to the utility value included in the Fair Trade products. The research questions were designed in order to get information related to the frequency and place of buying Fair Trade products, the subjective importance of different product-related factors (mainly packaging, taste, price, BIO or Fair Trade quality, brand name, information of the origin and the perceived availability) and the expectations regarding the price premium paid.

The simple analysis of the average price of the Fair Trade and conventional coffee brings an important insight into the question "What is in general the premium paid for the Fair Trade quality?" However, through such a simplification we cannot estimate other factors associated with the parallel product's qualities of the Fair Trade products available in the Czech Republic. In order to determine other important factors influencing the retail price of coffee, we present a general static linear model that estimates the causal effect of different qualities on

the price for the subsequent empirical estimation. The hedonic model based on the multiple regression equation is then estimated – with the retail price of coffee as the dependent variable and as the explanatory variables: BIO and Fair Trade quality; attractiveness of packaging, available information, traceable origin and volume of packaging defined as the predicted variables. The ordinary least squares (OLS) method was employed for estimating the unknown parameters.

The assumption here is that all the variables except for the packaging volume have a positive influence on the final retail price. The effect can be direct through the real additional costs in the supply chain or through the associated subjective (hedonic) values for the consumer given by the perceived utility function. For the important difference between the conventional and specialty coffee, we could not use the direct professional coffee tasting comparison or any sensoric evaluation of the coffee. Therefore, we used the packaging design, organic quality and the available information including the origin of coffee as proxy characteristics of the specialty coffee.

Data

The data from the questionnaires were collected in three Fair Trade shops in Praha and Brno. The number of the correctly filled questionnaires is $n = 120$. The main group of data for the qualities and prices of different coffees were collected nation-wide during summer 2010 during the stratified random sampling. The collected data covered all the main types of ground non-instant coffee for different categories of retail (café shop, fair trade shop, common grocery shop, supermarket, hypermarket and e-shop) in relation to the size of a city or a village across the country. Whole-bean and instant coffees were not included.

Summary of the different factors:

- (1) BIO – organic quality (dummy variable = 0 for conventional, 1 for BIO certification)
- (2) BIO FT – Fair Trade quality (dummy variable = 0 for the conventional, 1 for the Fair Trade. For the sake of the research, the Fair Trade quality means either the FLO Fairtrade certification or the product brand of the supply chain covered by the membership in the WFTO)
- (3) BIO PACK – quality of packaging design (variable = scale of categories ranging from 0 to 2 representing the design of the coffee). Criteria for the quality of design were set up by the focus group discussion within the research team.

- (4) BIO INFO – the available product information, based on the product information or the brand owner web-page information (variable = scale of categories ranging from 0 to 3 expressing the quality of the available information for the consumer. Starting from the basic legally binding information to the information covering the type of coffee, producer characteristics, the preparation information, flavour, etc.)
- (5) BIO ORIG – traceability of the origin (dummy variable = 0 for unknown origin of blended coffee, 1 for known origin of single-type or known composition of blended coffee origin)
- (6) BIO SIZE – the size of the packaging (variable = net weight of the packaging)

The research covered all the mainstream brands of coffee of the dominant roasters and traders in the Czech Republic – Douwe Egbert (Sara Lee), Carte Noir, Jacobs, Dadák (Kraft), Mokate (Marila), Jihlavanka, Tchibo (Tchibo), Segafredo (Segafredo Zanetti) and Alvorada (Alvorada Kaffeehandels GesmbH) (based on Jeníček 1997). Since the dynamic increase in the number of small coffee roaster companies in the Czech Republic, there are hundreds of new types (origin, blends, or degree of roasting) of different coffees available. Therefore, it was necessary to limit the scope of samples to the coffee available generally in the retail independent of the brand owner⁵. In total, we evaluated 148 different coffee products for the price comparison. The main Fair Trade brands included into the sample are: Lobodis, GEPA, El-Puente, EZA, Mamacoffee, Cafedirect, Marks and Spencer, Tesco Finest, Simon Lévelt, Sonnentor and Café de Origen.

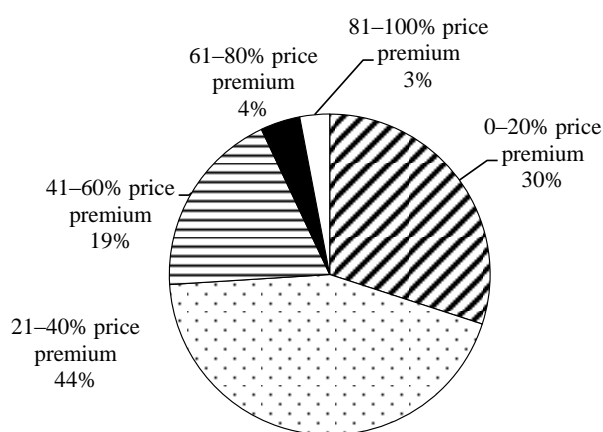


Figure 3. Expectations of consumers regarding price premium for Fair Trade products

RESULTS AND DISCUSSION

Results of the questionnaire in Figure 3 show that the majority (44%) of consumers believe to pay for the Fair Trade products 21–40% price premium. 30% expect to pay only 0–20% more than for conventional products. Based on this fact, we can conclude that the consumer attitude does not match the empirical results.

The most important subjective characteristic of coffee is taste (64% of the respondents put it on 1st place, 18% on the 2nd place). The Fair Trade quality usually occupies 1st–4th place in consumer preferences. Besides the quality matrix, the results of the survey show that 77% of the respondents prefer to know the origin of their coffee (Table 2).

Market analyzes reveal that there are 85 different Fair Trade types of coffees available in the Czech

Table 2. Matrix of the possible qualities of coffee for consumers (1 – the most important, 9 – the least important)

Importance/% of respondents	1	2	3	4	5	6	7	8	9
Packaging	2	6	8	7	9	19	17	23	9
Taste	64	18	6	3	2	2	1	1	3
Price	7	19	22	25	18	3	6	0	0
Organic quality	7	17	20	19	12	9	8	7	2
Fair Trade quality	20	10	18	18	12	9	6	7	0
Brand	2	7	8	10	16	15	17	18	7
Information	9	12	13	13	12	17	12	12	0
Availability	1	12	12	13	12	11	21	18	0
Other	4	0	2	2	3	0	1	7	81

⁵Even though the Starbucks is at the moment the biggest retailer of the Fairtrade coffee in the Czech Republic, this coffee is not generally available outside the Starbucks coffee shops.

Table 3. Basic statistical characteristics – price for 1 kg of coffee including VAT (CZK)

	Conventional	Fair Trade
Average	278.3	499.6
Median	234.5	478.0
Modus	160.0	423.0
Standard deviation	191.0	110.4
Minimum	90.0	286.0
Maximum	1590.0	776.0

retail. The number of the organic certified Fair Trade coffee is 73, which represents 85.9%. Compared to the international values, the higher share for the Czech Republic can be explained by the general strategy of the first Czech Fair Trade traders. They started to create the Fair Trade market initially with the BIO coffee due to a higher recognition of the organic label by the Czech consumers. Only after the creation of the trade channels for the new types of coffee, the marketing strategy shifted from the BIO to the Fair Trade. Only recently there is an increase in the imports of the non-organic Fair Trade coffee.

All the main basic descriptive statistical results for the conventional and Fair Trade coffee for $n = 517$ coffee products are listed in Table 3.

The average price of the Fair Trade coffee is 499.6 CZK for 1 kg (VAT included) while for the conventional coffee the value is 278.3 CZK. It is equal to 79.9% of the price premium for the Fair Trade coffee over the conventional one. However, the price of the conventional coffee shows a higher difference between the minimum and maximum values due to the highly differentiated market ranging from the bulk mass production coffee to the specialty high-market brands.

Table 4 provides results for the linear regression, as well as the test statistics for statistical significance of the results (values of the t -ratio).

Table 4. Results of the linear model

	Coefficient	t -stat
BIO	87.45	2.68
FT	75.36	1.87
PACK	106.14	7.53
INFO	65.89	4.69
ORIG	29.25	0.85
SIZE	-0.18	-5.07

The final linear equation is:

$$\text{PRICE} = 87.45 \text{ BIO} + 75.36 \text{ FT} + 106.14 \text{ PACK} + 65.89 \text{ INFO} + 29.25 \text{ ORIG} - 0.18 \text{ SIZE}$$

From these results, there can be inferred the partial effect of the Fair Trade quality on the retail price only as 75.36. Hence, a change from the conventional to the Fair Trade quality in the (predicted) variable would, in average, translate to approximately 75.36 CZK increase of the final retail price of 1 kilogram of coffee, *ceteris paribus*. The statistical significance based on the Student t -test is significant for $p = 0.90$. Even after incorporation of other factors with the empirical positive price influence, the Fair Trade quality pays an important role in the price increase.

If we relate the results to the fact that 1 kg of roasted ground coffee looses, due to roasting and milling process, approximately 20% of the weight, then 1 kilogram of packed coffee is equal to 1.2 kg of green coffee beans. The Fairtrade social premium paid to the farmer is 3.8 CZK/1 kg (0.10 USD/pound (FLO 2012b)) of green coffee. Like that, we get ratio 75.36 : 4.56 of the premium paid in retailing by the consumer to the premium paid to the farmer. It means that from every CZK, the consumer pays for the Fair Trade quality, the producer gets only 0.06 CZK in the Fairtrade social premium.

Compared with the market research in other countries, the price premium is much higher in the Czech Republic than in countries with the established and developed Fair Trade market. In general, the reasons can be divided into two groups:

- (1) Increase in the Fair Trade retail price due to the higher internal costs inherent to the Fair Trade system. These costs usually do not change with time.
- (2) Increase in the Fair Trade retail price due to the specific positioning of the Fair Trade products in the Czech market. These costs make the variable part of the final price and make a difference among the countries with a different level of development of the particular Fair trade market.

The most significant internal costs of the system are certification fees, which must be paid by the producer, trader and manufacturer as a guarantee for meeting the Fairtrade standards. Besides that, all wholesalers must pay 2% licensing fee, which stays in a country of the product destination for the promotion and campaigning (Asociace pro Fair Trade 2011c). There are also inherent costs for producers associated with meeting higher social and environmental standards on their farms. Down the supply chain, the

importer bears higher costs due to the requirement of a direct contact with the producer and providing the pre-financing service, which worsens his/her cash-flow standing.

However, it can be observed through the cross-country comparison that the main reason for higher retail prices in the Czech Republic are above all due to the limited economies of scale. The cost of transportation, packaging, storing and marketing are relatively high due to the small turnover of the main Fair Trade companies. There are 7 Fair Trade traders that operate on a small basis with high operational costs. The majority of Fair Trade products are re-imported from the EU15 countries. Only one company processes coffee directly in the Czech Republic (Mamacoffee s.r.o. company). The Fair Trade market is building its position, which brings high associated overhead and marketing costs (campaigns, education of consumers, associating story to every product, etc.) for positioning of new products and brands, and differentiating the products from the bulk commodity coffee. There is also the strategy of the majority of companies to start with high-end luxury products (BIO, single origin coffee, arabicas, fancy packaging, etc.) and besides the Fair Trade quality, they promote other qualities of their coffee. First selling points for the Fair Trade products are the places with the associated higher margins and specific target customers. Last but not least, due to the low competition, suppliers and retailers can charge higher margins for consumers that appreciate the perceived social and ecological qualities, but who are less sensitive to the price and selling place of the product.

The negative price situation changes in parallel with the Fair Trade market development. The main driver for the price decrease is the entering of the mainstream food companies into the Fair Trade business. Usually, there is no change in the final price when any multinational company switches to the Fair Trade (like the Kit Kat by the Nestlé or the Dairy Milk by the Cadbury). Even in the Czech Republic, the trend of the private Fair Trade labels of big retailing chains brings the price down (for example the Fairtrade espresso or the Fairtrade Costa Rica that belongs to the TESCO Finest brand or the Tchibo espresso Fairtrade).

The results clearly show that the price increase due to the organic quality is higher (the coefficient 87.45) with a more persuasive statistical importance. This is in line with the empirical evidence, since the organic certification represents a completely different production process already on the farm level. Besides that, the whole supply chain (even storing

of the consumer-ready products) till the final stages must be controlled and inspected, which also necessarily increases costs. In the case of the Fairtrade coffee, the production process is not too different from the conventional one and the monitoring and auditing ends with the manufacturer. Recognition of the BIO label is much higher among Czech consumers, which allows the retailers to charge higher margins as well. According to the annual research of the Czech organic market, the bioproducts are in general by 140% more costly than the conventional products (Pro-Bio Liga 2010).

The highest increase in price is caused by the quality of packaging. This fact reflects the presumption that the quality of packaging and the available information about the coffee is a proxy variable for the specialty coffee sector market positioning. Or at least, it limits the influence of extremely cheap types of coffee in a very simple bulk packaging. There is also the evidence that the traceable origin of coffee makes a positive price difference (coefficient 29.25). However, this variable does not exhibit any statistically significant result. The effect of the packaging size is the only a negative variable, which is in accordance with the empirical evidence of the general marketing strategy. The type of selling place (e-shop, hypermarket, coffee shop, etc.) was also modelled, but its impact was highly statistically insignificant. This shows that the premium difference based on the various type of retail is not the main factor.

CONCLUSIONS

The presented paper sheds light on the effectiveness and impact of the current Czech Fair Trade market on the small producers that are at the beginning of the long supply chain of the Fair Trade coffee. If we consider the fact that international prices of coffee have been above the Fairtrade minimum price for several years together with the small ratio between the price premium paid by the consumers and the price premium received by the producers, we can ask whether Fair Trade is really an effective system that brings a tangible impact on the small producers in the South.

However, the question remains how the separated price premium based calculations are relevant for all direct and indirect benefits of the whole Fair Trade system. The Fair Trade does not aim at functioning solely as a charity which provides the transfer of money from the consumers to the producers. There are several instruments how Fair Trade tries to establish the economic, political and psychological link

throughout the whole supply chain and the whole concept must be viewed in broader picture of the multi-instrumental empowerment of the small and vulnerable producers in the South. To calculate a true measurement of the return to farmers per the unit of retails price, all of the external benefits to producers must be taken into account.

REFERENCES

- Asociace pro Fair Trade (2011a): Annual report 2010. Asociace pro Fair Trade, Praha.
- Asociace pro Fair Trade (2011b): Fair trade standardy a jejich kontrola ve zkratce. (Fair-Trade standards and its monitoring in a brief.) Available at: <http://www.fairtrade-asociace.cz/?block=56&sub=102> (accessed 18.1.2011).
- Asociace pro Fair Trade (2011c): Prodej Fairtrade certifikovaných výrobků v České Republice. (Selling of Fair-Trade® certified products in the Czech Republic.) Available at: <http://fairtrade-asociace.cz/?block=71&sub=91>
- Buttel F.H. (2001): Some reflections on late twentieth century agrarian political economy. *Sociologia Ruralis*, 41: 165–81.
- Dicum G., Luttinger N. (1999): *The Coffee Book: Anatomy of an Industry from the Crop to the Last Drop*. The New Press, New York; ISBN 1565844521.
- European Milk Board (2011): What is Fair Milk? Available at www.europeanmilkboard.org/consumers/what-is-fair-milk.html (accessed 2.2.2011).
- FAO (2009): The market for organic and Fair-Trade coffee. FAO project GCP/RAF/404/GER. Food and Agriculture Organization of the United Nations, Rome.
- FLO (2009): Growing stronger together: annual report 2009–10. Fairtrade Labelling Organisations International. Available at www.fairtrade.net/fileadmin/user_upload/content/2009/resources/FLO_Annual-Report-2009_komplett_double_web.pdf
- FLO (2011): Generic Fairtrade standards for Small Producers' Organizations. Version: 15.08.2009. Fair Trade Labeling Organization. Available at <http://www.fairtrade.net/654.0.html> (accessed 8.01.11).
- FLO (2012a): Minimum Price and Premium Information. Available at <http://www.fairtrade.net/793.0.html> (accessed 12.1.2012).
- FLO (2012b): Fairtrade International (FLO)/About Fairtrade/ What is Fairtrade? Available at http://www.fairtrade.net/what_is_fairtrade (accessed 2.2.2012).
- Goodman M.K. (2004): Reading fair trade: political ecological imaginary and the moral economy of fair trade foods. *Political Geography*, 23: 891–915.
- Hospodářské noviny (2011): Výrobky s označením Fair Trade zná 43 procent Čechů. (43 per cent of Czechs know Fair Trade products.) Available at http://investice.ihned.cz/c3-39287110-i00000_d-vyroby-s-oznacenim-fair-trade-zna-43-procent-cechu (accessed 13.1.2011).
- ICO (2011a): Monthly coffee market report. International Coffee Organization, January 2011.
- ICO (2012): On-line statistical database – Coffee prices. International Coffee Organization. Available at http://www.ico.org/coffee_prices.asp (accessed 6.1.2012).
- Jeníček V. (1997): Mezinárodní vazby obchodu kávou v České republice a její spotřeba. (Coffee international trade linkage and coffee consumption in the Czech Republic.) Agris portal. Available at <http://www.agris.cz/zemdelstvi/index.php?iPage=9&PHPSESSID=94&iRegion=0&iComodity=940&iSub=523&PHPSESSID=94>
- Konečný T., Mysliveček J. (2008): Fair Trade – How Fair It Actually Is? Working Paper No. 367, CERGE-EI, Prague.
- Krier J.M. (2007): Fair Trade 2007: new facts and figures from an ongoing success story. A report on Fair Trade in 33 consumer countries. Dutch Association of Worldshops, Netherlands, August.
- Lewin B., Giovannucci D., Varangis P. (2004): *Coffee Markets. New Paradigms in Global Supply and Demand*. The World Bank, Washington.
- Marsden T., Banks J., Bristow G. (2000): Food supply chain approaches: exploring their role in rural development. *Sociologia Ruralis*, 40: 424–38.
- Mendoza R., Bastiaensen J. (2003): Fair trade and the coffee crisis in the Nicaraguan Segovias. *Small Enterprise Development Journal*, 14: 36–46.
- Mohan S. (2010): Fair Trade Without the Froth. A Dispassionate Economic Analysis of 'Fair Trade'. The Institute of Economic Affairs, London; ISBN 978 0 255 36645 8.
- Murdoch J., Marsden T., Banks J. (2000): Quality, nature, and embeddedness: some theoretical considerations in the context of the food sector. *Economic Geography*, 76: 107–125.
- Nicholls A., Opal Ch. (2005): *Fair Trade: Market-Driven Ethical Consumption*. Sage Publications Ltd; ISBN-10: 1412901057.
- OECD (2003): *Organic agriculture: sustainability, markets and policies*. CABI Publishing, Wallingford.
- Potravinářská komora (2010). Analýza trhu s bio-potravinami v České republice. (Organic food market analyzes in the Czech Republic.) Potravinářská komora ČR, Praha.
- Pro-Bio Liga (2010): Comparison test of organic and conventional food products in shops and supermarket retail chains (Srovnávací test cen biopotravin a konvenčních potravin v obchodech a obchodních řetězcích. Pro-Bio Liga, Praha.
- Raynolds L.T. (2002): Consumer/producer links in Fair Trade Coffee Networks. *Sociologia Ruralis*, 42: 404–424.
- SCAA (2008): What is Specialty Coffee? Available at www.scaa.org/pdfs/Press-What-is-Specialty-Coffee.pdf

- Sidwell M. (2007): *Unfair Trade*. Adam Smith Research Trust, ASI (Research) Ltd., London; ISBN: 1-902737-55-5.
- Společnost pro Fair Trade (2011): Výsledky průzkumu: Klasa, Bio a Fairtrade jsou mezi Čechy nejznámějšími certifikáty původu zboží. (Results of research: Klasa, BIO and Fairtrade are the most recognized certificates of origin among Czechs.) Available at <http://www.fairtrade.cz/cz/5-fair-trade/196-vysledky-naseho-pruzkumu-klasa-bio-a-fairtrade-jsou-mezi-cechy-nejznamsimi-certifikaty-puvodu-zbozi> (accessed 18.2.2011).
- Stecklow S., White E. (2004): What Price Virtue? At Some Retailers, 'Fair Trade' Carries A Very High Cost Stores Charge Big Markups On Goods Intended to Help Farmers in Poor Countries. *The Wall Street Journal*. June 08, 2004.
- STEM/MARK (2010): *Ekologické zemědělství a biopotraviny*. (Organic Agriculture and BIO products.) MZ, Praha.
- The Economists (2006): Voting with your trolley. Can you really change the world just by buying certain foods? *Food politics*. Print Edition, December 7, 2006.
- Utting K. (2009): Assessing the impact of Fair Trade coffee: Towards an integrative framework. *Journal of Business Ethics*, 86: 127–149
- Weber J. (2007): Fair Trade coffee enthusiasts should confront reality. *Cato Journal*, 27: 109–117.
- Weitzman H. (2006): Bitter cost of 'fair trade' coffee. *Financial Times*, September 9, 2006.
- Wilson T. (2006): Macchiato Myths. The dubious benefits of fair trade coffee. *IPA Review*, 58: 25–28.

Received: on 6th April 2012

Accepted after corrections: 15th April 2012

Contact address:

Jiří Hejkrlik, Faculty of Tropical AgriSciences, Czech University of Life Sciences Prague, Kamýcká 129,
165 21 Prague 6, Czech Republic
e-mail: hejkrlik@its.czu.cz
