

# Factors affecting consumers' perception and willingness to pay for Fairtrade bananas during a cost-of-living crisis

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## Abstract

The study set out to investigate factors affecting consumers' ethical perception and willingness to pay for Fairtrade bananas during the cost-of-living crisis in the UK. A survey was distributed via social media resulting in 357 valid responses which were analyzed using IBM-SPSS-28. The main influencing factors on

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consumers' perception of Fairtrade are still strong ethical beliefs towards socio-economic benefits to farmers followed by cost, convenience and quality. No demographic factors significantly influenced purchase behaviour. A framework representing the factors influencing consumers was proposed.

During a cost-of-living crisis, despite some consumers' price sensitivity, they are still willing to purchase and pay more for Fairtrade bananas. Ethical knowledge and personal values sustain the purchase of ethically produced bananas. However, consumption would remain strong provided the price premium paid is not substantially high. When targeting consumers, the focus on overall awareness of Fairtrade and its values should be the key features in promotion campaigns.

**Keywords:** fair trading; ethical consumption; values; price sensitivity; willingness to pay

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## **Introduction**

Bananas are an invaluable nutrition source for millions of people (BASIC, 2015). The crop occupies a vast agricultural production area (FAO, 2022), and commands considerable international trade (Voora, Larrea & Bermudez, 2020; Shahbandeh, 2022). Yet, in spite of its ubiquitous presence, banana production and consumption are affected by a number of issues. On the one hand, the prevalence of viral and fungal diseases has been aggravated by climate change. On the other hand, strict produce standards, market access and macro-economic uncertainty have caused constraints in international trade leading to price volatility at the farmgate. Consequently, small farmers in banana-producing countries are also faced with social-economic instability (Voora et al., 2020).

Not so long ago, the so-called banana 'trade war' between the US and the European Union (EU) caused macro-economic instability that affected the supply of that fruit from Central America and other regions. On the one hand, North American corporations controlled the trans-Atlantic banana trade, particularly from the Caribbean. On the other hand, in the early 1990s, the EU,

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by granting privileged access to its Single Market to former colonies under the Africa–Caribbean–Pacific (ACP) quota regime (Europa, 2011; Read, 2001), effectively imposed a trade barrier to third countries. As a result, the American agribusiness corporations made a formal complaint against said trade barrier. After nearly sixteen years, the World Trade Organization (WTO), under its dispute resolution mechanism, ruled that the EU should grant market access, thus ending the banana price war (Europa, 2011).

Some might believe that fighting against import tariff barriers was a just cause during that period. Yet, it is estimated that the banana price paid by consumers dropped by 50 per cent in some years (BASIC, 2015). In addition, a freer market 'post banana war' was estimated to have also resulted in further price reduction caused by increased competition, consequently reducing farmers' income (Europa, 2011). Nonetheless, during that same period, input costs continued to rise against declining farmgate prices (BananaLink, 2016) thus subjecting small farmers to harsher livelihoods (Bebber, 2022) because of loss of revenue.

It is against this background that the Fairtrade initiative became relevant to banana farmers (Barrientos & Smith, 2007). The Fairtrade principle was set out based on enabling small producers' organizations to receive a premium social price over the minimum attracted by the commodity to support initiatives such as healthcare, education and training in producing countries (Doherty & Huybrecht, 2013; Jafee, 2007). Small producer organizations sign up for Fairtrade Standards Certification (Reed, 2012) and are subject to rigorous audit inspections (FLOCERT, 2020). In turn, certified banana-producing organizations have access to export markets that bypass traditional trading channels, consequently, enabling farmers to achieve a more resilient subsistence against market volatility (Vieira & Aguiar, 2009; Bennett, 2012).

Since the publishing of the United Nations Millennium Goals (UN, 2022), consumers have also become increasingly aware of their responsibility and lifestyle choices that impact sustainable consumption (Hanss & Böhm, 2012; Bengtsson, Alfredson, Cohen, Lorek and Schroeder, 2018; Prothero et al., 2011). Ethical consumption (Vermeir & Verbeke, 2006) has become a growing global trend, particularly in the food and drink sector (Littler, 2009; Hamari, Sjöklint & Ukkonen, 2016) which has benefited the fair-trading cause.

Yet, during a global economic instability period characterized by the cost-of-living crisis, ethical banana-producing organizations are faced with many uncertainties. These organizations find themselves further aggravated by the slump in consumer markets (UNDP, 2022) caused by lower wages (Blanden, Doepke & Stuhler 2022) and rising inflation. The rapid increase in energy prices, an important cost component (Institute for Government, 2022) for food companies, has reduced consumers' real disposable income which has become a feature of the cost-of-living crisis. Moreover, the actual global economic instability has been also aggravated by supply chain adjustments during and post the COVID-19 pandemic, the conflict in Eastern Europe between Russia and Ukraine and Brexit in the case of the United Kingdom (UK).

Consumers have been subject to inflationary trends in food, utilities and fuel, which, in the case of the UK alone, has impacted on 89 per cent of its population (Office of National Statistics, 2022a). In light of this, many UK consumers find themselves conflicted between the reality of their eroded purchasing power, their needs and wants as well as their ethical values. Moreover, when considering ethical consumption, which is guided by decision-making actions informed by norms, conscience, values and morals (Reczek & Irwin, 2015), consumers have to prioritize what to spend. Consequently, Fairtrade banana farmers, in addition to increased production costs are also faced with market uncertainties. The driving mechanism behind consumers' preference for Fairtrade products consists of a complex bundle of ethical attributes which cannot be expressed by singular behaviours such as, for example, by green labelling (Park, 2018; Elliott, 2013) alone. Lyon (2006) and Teyssier, Etilé and Combris (2012) posited that it is ultimately the consumers' willingness to pay (WTP) for an ethical premium, as represented by Fairtrade labelling, which will sustain the demand for Fairtrade products (Appelbaum & Laitinen, 1979). Consumers have been willing to pay a higher price for a Fairtrade product because of the significant perceived value attached to such a certification (Darian, Tucci, Newman & Naylor, 2015; Wongprawmas, Pappalardo, Canavari & Pecorino, 2016; Konuk, 2019). Despite this, consumers have also valued other distinct narratives concerning Fairtrade attributes (Park, 2018) which can range from intrinsic, extrinsic and augmented attributes (Krystallis & Chryssohoidis, 2005) as well as quality, value and trust. Conversely,

the lack of perceived value (disinterest or ignorance) about a product has also been deemed as a significant barrier to the WTP for Fairtrade products (Pelsmacker, Janssens, Sterckx & Mielants, 2006; Fridell, 2007; Pedregal & Ozcaglar-Toulouse, 2011).

Sporleder, Kayser, Friedrich and Theuvsen (2014) looked specifically at consumers' preferences for sustainable bananas. In their study, awareness played a significant role in consumers' WTP for ethically certified goods (Fridell, 2007; O'Connor, Sims & White, 2017; Rees et al., 2019). Often, sustainability-related labels tended to be poorly identified (Grunert, Hieke & Wills, 2014). Thus, improving knowledge and information has helped shift consumers' actions and motivations (Ruggeri, Corsi & Nayga, 2021) towards a more positive purchasing behaviour. In addition, purchase frequency and regularity has also helped establish consumers' trust, which is considered one of the most important factors as to why some sustainability-related labels have succeeded while others have not (Zou & Hobbs, 2010; Lappeman, Orpwood, Russell, Zeller & Janson, 2019). Despite this, without clear information on the reason for a price premium, consumers' purchase decisions tended to be based on price alone (Rode, Hogarth & Le Menestrel, 2008).

It has been acknowledged that the factors behind pro-ethical behaviours that inform consumers' Fairtrade preferences are complex. Yet, the literature fails to identify critical key factors that might support consumers' WTP for sustainable products, particularly during a cost-of-living crisis. Therefore, a gap has been identified regarding the likely relevance of a Fairtrade product such as bananas during this crisis. The authors then aimed to investigate the factors that affected consumers' perception, their price sensitivity and pro-ethical attitudes towards willingness to pay for Fairtrade bananas in an important market such as the UK. Bananas were chosen as they are a commodity which is widely produced and traded, as well as routinely consumed, hence, a product with a high market penetration in UK households.

## **Methodology**

Following the submission and approval of a project proposal to the Ethics Committee at Harper Adams University, a questionnaire survey was designed using JISC. JISC is a data-secure online platform which is deemed appropriate for

the nature of the enquiry as it allows for collecting large amounts of data (Saunders, Lewis & Thornhill, 2019). The survey was distributed through different social media platforms such as Twitter, Facebook and LinkedIn following a non-probabilistic convenience (Galloway, 2005) and snowball sampling techniques (Blumberg, Cooper & Schindler, 2014; Jager, Putnick & Bornstein, 2017). Between February and March 2023, a total of 357 valid responses were collected from residents across the UK (England, Scotland, Wales and Northern Ireland). The sample size, the data collection techniques and the consistency of results indicate that the information gathered was valid and reliable.

Statistical Package for Social Sciences (SPSS 28) was used to analyze the data. First, a Kolmogorov-Smirnov test was conducted to check whether the results were normally distributed (Mishra et al., 2019). The results indicated they were *not* normally distributed, thus the Factor Analysis (KMO) test as well as the Bartlett test of Sphericity were conducted to ascertain whether attributes could be grouped. Furthermore, Spearman correlation tests were conducted to examine whether there was a relationship between two set variables. In the cases where a significant relationship was established, at a 5 per cent level of significance, the correlation coefficient ( $\rho$ ) revealed the strength of the relationship based on its value (weak, medium, strong) as well as the direction based on its sign (positive–negative) (Pallant, 2016; Akoglu, 2018). As such, a  $\rho$  value between 0.10–0.29 would indicate a weak relationship; 0.30–0.59 moderate and 0.60–0.99 would support a strong relationship (Cohen, 1998, pp. 79–81).

## **Results**

The majority of the respondents were from England, followed by Wales, Scotland and Northern Ireland, as illustrated in Figure 1. Despite this, there were some underrepresented areas such as rural Northern Ireland and rural Scotland. This can be explained by the snowball distribution technique used. Yet, an acceptable coverage has been acknowledged considering the respective pin locations of the respondents based on their first four postcode digits. As such, the sample was representative in terms of the population distribution in the UK aligning with statistics provided by the ONS (Office of National Statistics, 2022b).

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**Figure 1** A map showing the distribution of the location of respondents according to their respective initial four postcode digits generated by JISC

Due to the use of social media and the snowball technique, the sample tended to be predominantly female. Usually, skewed samples towards a more prominent female participation has been an expected outcome in the literature. Women often place a higher emphasis on ethical manufacturing practices during purchase than men (Davies, Lee & Ahonkhai, 2012, Zhao, Gong, Li, Zhang & Sun, 2021). Moreover, the literature also supported gender differences in environmental concerns and ethical responsibility, with women often displaying greater levels of awareness than men (Hunter, Hatch & Johnson, 2004; Magano, Au-Yong-Oliveira, Ferreira & Leite, 2022).

There were two average age peaks, at 18 to 24 and then at 45 to 64. Most of the respondents were in either part-time or full-time employment. Tests were conducted to ascertain whether age, frequency of purchase and household income affected the WTP for Fairtrade bananas (as seen in Table 1). It could be established that there were no significant differences in WTP among the three factors tested.

**Table 1** Nonparametric correlation strengths: WTP against age, frequency and income

Variables Relationship		Kruskal - Wallis
Variable 1	Variable 2	(p-value)
Range of increasing value of WTP	Age	0.443
	Frequency of Purchase	0.187
	Household Income	0.129

The respondents indicated they had a high awareness of the Fairtrade logo. That was particularly due to knowledge about labelling information and recall of the logo displayed on packaging of products such as chocolate, coffee, sugar and wine, as well as fruit and vegetables, such as bananas. Fairtrade products were usually purchased from food retailers (supermarkets). Bananas tended to be typically part of a routine grocery shopping item, with the respondents significantly preferring different types such as loose, Fairtrade and conventional (Friedman mean rank values of 5.57, 4.75 and 4.63), respectively.

The majority declared they checked labelling information either often or sometimes, and the great majority, 85 per cent of the respondents, also indicated a high frequency of purchasing Fairtrade bananas. That was supported by the respondents declaring themselves to hold a high sense of social responsibility, ethical values and trust in Fairtrade. Mann-Whitney U statistical analysis revealed that the perceived understanding of Fairtrade compared to those respondents who did not check for certification was not due to chance (Mann-Whitney U statistic of 4079.00; Wilcoxon W value of 17,609.00 and Z statistic of  $-4.166$  ( $p < 0.001$ )).

Yet, despite gender, consumers do not tend to look for information on certified methods of production such as Fairtrade, Organic (Soil Association), Rainforest Alliance, etc., when purchasing bananas ( $X^2$  value = 2.433,  $df = 2$ ,  $p = 0.296$ ). Conversely, those respondents who indicated a low frequency of purchasing Fairtrade bananas attributed it to Not Being a Priority; Cost; Convenience; Lack of Interest in Certification; Lack of Awareness; Lack of Availability, Time and Financial Constraints.



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Interestingly, when attempting to correlate the respondents' understanding of what Fairtrade stood for with other factor variables, they all tended to be positive (see Table 2 below). Despite this, the strength of the relationship varied. For example, there was a strong correlation between understanding Fairtrade benefits and the social-economic sustainability of banana producers. There was a moderate correlation regarding providing support to producers, and there was a low correlation towards environmental preferences and taste.

**Table 2** Nonparametric correlations strengths: participants' understanding of Fairtrade against other factor variables

Variables Relationship		Strength of Correlation
Variable 1	Variable 2	(Spearman rho)
I understand what Fairtrade stands for and the benefits it brings.	Fairtrade makes a credible difference to producer social-economic sustainability.	Strong positive (0.577)
	I trust Fairtrade certification.	Strong positive (0.540)
	I purchase Fairtrade to meet my personal values and stewardship responsibility.	Moderate positive (0.334)
	I purchase Fairtrade to ensure producers are supported.	Moderate positive (0.427)
	I purchase Fairtrade because it is better for the environment.	Weak positive (0.1210)
	I purchase Fairtrade bananas because they taste better.	Weak positive correlation (0.138)
	It is important for consumers to make ethical choices.	Moderate positive (0.380)
	I can impact social-economic sustainability through my purchasing habits.	Moderate positive (0.358)

In addition, the relationship between Fairtrade perception and WTP was evaluated. The results presented in Table 3 indicate significant positive relations in all pairs analyzed due to the probability value in all cases being less than 0.05. The results from the correlation coefficients also varied between 0.134

and 0.208 and were positive, despite suggesting weak positive relations in all examined pairs. As such, the more consumers believed that (1) Fairtrade made a positive and credible difference to producers’ social-economic sustainability; (2) Understood its benefits; (3) Trusted Fairtrade certification; (4) Purchased Fairtrade to meet their personal values and stewardship responsibility; as well as (5) Believed they could have an impact on social-economic sustainability through their purchasing habits, the more they would be willing to pay a premium for a bunch of five Fairtrade-certified bananas. However, the weak strength in the relationships tested supports that these factors explain only a small proportion of the variations in the additional amount consumers would be willing to pay and, thus, may not be considered as the main determinants.

**Table 3** Participants’ WTP against other factor variables

Variables Relationship		Strength of Correlation (Spearman rho and p values)
Variable 1	Variable 2	
How much would you additionally be willing to pay for a bunch of five Fairtrade-certified bananas?	I believe Fairtrade makes a credible difference to producers’ social-economic sustainability	$r = 0.208, p < 0.001$
	I trust Fairtrade certification	$r = 0.174, p < 0.001$
	I purchase Fairtrade to meet my personal values and stewardship responsibility	$r = 0.194, p < 0.001$
	I understand what Fairtrade stands for and the benefits it brings	$r = 0.134, p < 0.012$
	Belief in Fairtrade’s positive impact on producers’ social-economic sustainability	$r = 0.208, p < 0.001$
	I can impact upon social-economic sustainability through my purchasing habits	$r = 0.208, p < 0.001$

As for the impact of the cost-of-living crisis on Fairtrade purchasing behaviour, there were significant differences among the participants’ responses (Chi-squared = 68.156,  $p < 0.001$ ). On the one hand, they declared that the cost-of-living crisis would affect their ethical consideration at the moment of

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purchase. On the other hand, they agreed that the likely impact of the cost-of-living crisis would not be substantial should the Fairtrade premium price not be high. Furthermore, as shown in Table 4, significant gender differences were established due to the significance being less than 0.05 (Mann-Whitney U = 12219,  $p = 0.045$ ). In this case in particular, females tended to feel the effect of ethical considerations more during a cost-of-living crisis (mean rank = 186.30) than males (mean rank = 163.84).

**Table 4** Impact of the cost-of-living crisis on WTP

	The cost-of-living crisis affected my ethical considerations at the moment of purchase	I am less WTP for Fairtrade certification due to the cost-of-living crisis	I would still pay more for Fairtrade products as the premium was not substantial
Mann-Whitney U	12,219.000	12,476.500	12,918.000
Wilcoxon W	19,005.000	19,262.500	19,704.000
Z	-2.000	-1.693	-1.253
Asymp. Sig (2-tailed)	0.045	0.090	0.210
Male mean rank	163.84	166.06	169.86
Female mean rank	186.30	185.23	183.40

## Discussion

For the purpose of brevity, as shown in Figure 2 below, a framework is proposed as an attempt to characterize the factors identified that affect the purchase of Fairtrade bananas. Colour coding was used, ranging from green (strong) to red (very weak) to establish the extent the factors influence Fairtrade banana-purchasing behaviour. The solid vectors (arrowed lines) indicate the relationship direction between the factors, while the traced lines are an indirect one.

As supported by Prothero et al. (2011), Hanss and Böhm (2012) and Bengtsson et al. (2018), motivations, beliefs and benefits were identified as being the leading factor (high correlation) that affected the consumers'

perception towards Fairtrade bananas. There was a strong correlation between the respondents' understanding of Fairtrade benefits and their beliefs about the extent the price premium positively impacted on the farmer's economic and social sustainability. As expected, better-informed respondents were more likely to recognize the value of Fairtrade. Despite this, there was a weak correlation between the respondents' understanding of what Fairtrade stood for, their environmental preferences and tastes. A Friedman rank test was then conducted thus confirming that the respondents' Fairtrade environmental value (4.28) was lower than the social-economic one (5.76). This is in line with Peano, Merlino, Sottile, Borra and Massaglia (2019) who posited that consumers might differentiate between aspects of ethical consumption, thus focusing on some specific factors while ignoring others.

As for the perception towards Fairtrade products and the WTP, Spearman rho value indicated that the correlations between factors, despite being positive, tended to be weak ( $r$ -value between 0.10–0.29). A comparison between what the respondents understood about Fairtrade before and after a statement was presented to them and indicated that differences between the respondents' perceptions (Wilcoxon Signed Ranks Tests:  $z = -8.948$  and  $p$ -value  $< 0.001$  (2-tailed)) were significant. This meant the respondents' WTP was higher after having read the statement. Thus, it is likely that those respondents who had either little awareness about the Fairtrade logo in general or what Fairtrade stood for could then be more discerning about their choices.

During a cost-of-living crisis, the respondents indicated they were still WTP more for Fairtrade bananas provided the price premium was not substantial (Friedman mean rank 2.25). The respondents also indicated that the cost-of-living crisis was not affecting their ethical choices and purchase intentions. On the one hand, this could be interpreted as reassuring for Fairtrade organizations since sales would hopefully not be impacted much. On the other hand, that might not be sufficient to reassure banana-producing organizations that demand would be robust enough to sustain actual levels of supply. It is thus unlikely that consumer price would not function as a strong signal to Fairtrade banana-producing organizations.

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Figure 2 Framework summarizing factors affecting ethical behaviour

## Conclusions

It is clear that some Fairtrade bananas attributes significantly affect the respondents' perception more when compared to conventional bananas. The framework proposed, as seen in Figure 1, is a good attempt to represent a comprehensive idea of how UK consumers are influenced when purchasing Fairtrade bananas. As supported by the literature, personal values and ethical concerns play a strong role in purchase behaviour. Therefore, the respondents' pro-ethical purchase knowledge significantly impacted upon their Fairtrade purchasing behaviour. Consequently, it is worth highlighting the importance of promoting awareness and fostering trust in ethical certification is an essential marketing component.

Despite a cost-of-living crisis, the sales of Fairtrade bananas can still be sustained. However, marketing campaigns should be aimed at increasing brand visibility, emphasizing personal values and ethical choices, incorporating cultural values and norms, and attracting quality-oriented consumers. This study's timeliness and relevance are crucial for ensuring the social-economic sustainability of banana producers during challenging times.

Future studies could attempt to establish comparisons between pro-environmental or pro-ethical behaviours compared to the one presented here. Marketers and those working in the certification bodies should understand the strength of the logo and the message associated with it. Campaigns to reinforce the relevance and to keep awareness high of what fair trading stands for should be part of a permanent communications strategy.

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