# Consumer willingness to pay for domestic 'fair trade': Evidence from the United States

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### Abstract

The success of fair trade labels for food products imported from the Global South has attracted interest from producers and activists in the Global North. Efforts are under way to develop domestic versions of fair trade in regions that include the United States, Canada and the United Kingdom. Fair trade, which is based on price premiums to support agricultural producers and workers in the Global South, has enjoyed tremendous sales growth in the past decade. Will consumers also pay a price premium to improve the conditions of those engaged in agriculture closer to home? To address this question, consumer willingness to pay for food embodying a living wage and safe working conditions for farmworkers was assessed with a national survey in the United States. The question format was a discrete choice (yes/no) response to one of four randomly selected price premiums, as applied to a hypothetical example of a pint of strawberries. Multilevel regression models indicated that respondents were willing to pay a median of 68% more for these criteria, with frequent organic consumers and those who consider the environment when making purchases most willing to pay higher amounts. Although the results should be interpreted with caution, given the well-known gap between expressed attitudes and actual behaviors, we conclude that there is a strong potential market opportunity for domestic fair trade.

Key words: fair trade, domestic, willingness to pay, consumers, ecolabels

## Introduction

Introduced in Europe in 1988, fair trade is a food-labeling scheme designed to support social justice and ecological sustainability in the Global South. Fair trade was brought to the USA a decade later, first for coffee and then for tea, chocolate, tropical fruits, rice and spices. High interest in fair trade is indicated by an increase in sales and the expansion of locations where fair trade products are sold. For example, the sales of coffee increased approximately 75% annually from 2001–2005, with similar growth rates for newer products<sup>1</sup>, and distribution has expanded to the point that fair trade coffee is available at some McDonald's and many Dunkin' Donuts locations<sup>2</sup>.

Currently, fair trade applies only to imported food products from the Global South. However, the issues that fair trade principles address—fair price, fair labor conditions, direct trade, democratic and transparent organizations, community development and environmental sustainability<sup>3</sup>—are also relevant to the Global North. Are consumers as willing to pay a price premium for these principles in their own countries? In other words, does domestic fair trade have the same market potential as international fair trade?

Academic studies of consumers have found a willingness to pay a price premium for fair trade coffee<sup>4</sup>, but no comparable research exists for domestic fair trade<sup>5</sup>. To address the question of consumer support for domestic fair trade, we studied consumer willingness to pay premiums for a domestic product (strawberries) if it embodied basic fair trade principles of a living wage and safe working conditions for farmworkers. In this paper, we review the history of domestic fair trade, describe the research and explain the results, which indicate the level of potential consumer support for domestic fair trade.

### **Domestic Fair Trade**

Fair trade core business principles originated with a domestic focus on postwar European recovery and, as an alternative to free trade, was later developed as a model for improving the lives of workers in impoverished nations<sup>6</sup>. Since this time, fair trade has come full circle, with many

recognizing that conditions faced by agrarian workers in the Global North parallel those of workers in the Global South. In the USA, farm labor is poorly paid, dangerous and nondemocratic. For example, of the estimated 3 million or more farmworkers in the USA<sup>7</sup>, nearly 75% make less than \$10,000 a year, more than 60% meet federal definitions of poverty<sup>8</sup> and many go hungry despite their daily connection to food. Farm work is also one of the most dangerous occupations in the United States<sup>9</sup>. Low wages and occupational risk are related to the nondemocratic nature of farm labor. In most states farmworkers do not have the right to collective bargaining or overtime<sup>10</sup>. Lack of labor rights has been taken to an extreme in Florida where hundreds of farmworkers have recently been found working as slaves<sup>11</sup>. Farmworkers receive only 6% of the retail food dollar<sup>12</sup>. Many farmers also struggle with low prices for their products, as the farmer share of the retail food dollar has decreased from more than 40 cents in the 1950s and early 1970s to approximately 20 cents today<sup>13</sup>.

To address some of these injustices, a number of initiatives are in development to introduce a domestic version of fair trade in the UK, Canada and the USA. The Soil Association in the UK began testing a certified label that represents both organic and a fair price for British farmers in 2003<sup>14</sup>. A similar effort was initiated by the Farmer Direct Cooperative in Saskatchewan, AB, Canada in 2004<sup>15</sup>.

In the USA there have been several 'proto-' efforts, such as The Food Alliance label and its principles, in which safe and fair working conditions are included<sup>16</sup>. More recently, projects that explicitly use the words 'fair trade' to refer to domestically produced foods have been established. Wholesome Harvest is a coalition of 40+ farms in the Upper Midwest that markets 'fair trade organic meats'<sup>17</sup>. The Local Fair Trade Network based in Minneapolis, Minnesota currently links 22 farmers with nine retailers in Minnesota and Wisconsin. The retailers sign a pledge to cover the cost of production of the farmer, and the farmers sign a pledge to pay a living wage, recognize the right to collective bargaining and provide adequate health and safety protections<sup>18</sup>. Equal Exchange, a pioneer of fair trade coffee imports in the USA, has introduced three 'fairly traded' products sourced from US farms-organic cranberries, organic almonds, and conventional pecans from a cooperative of African-American farmers<sup>19</sup>. Many of the individuals and organizations behind these efforts are involved in the Domestic Fair Trade Working Group, which has developed 14 draft principles listed in Table 1.

Despite the proliferation of these initiatives, no systematic research has been conducted on consumer support for domestic fair trade. To assess this level of support, we conducted a survey to determine the extent to which consumers were willing to pay a price premium for 'fair trade' strawberries. We focused on fresh strawberries because of their similarities to international fair trade products. Strawberries are labor-intensive, chemical-intensive and, like coffee and chocolate, are 'somewhat of a luxury'

**Table 1.** Domestic Fair Trade Working Group draft principles.

Family scale farming
Capacity building for producers and workers
Democratic, participatory ownership and control
Rights of labor
Equality and opportunity
Direct trade
Fair and stable pricing
Shared risk and affordable credit
Long-term trade relationships
Sustainable agriculture
Appropriate technology
Indigenous peoples' rights
Transparency and accountability
Education and advocacy

Source: Domestic Fair Trade Working Group (2005)<sup>20</sup>.

commodity, although these foods have become more available and affordable since World War  $\Pi^{21,22}$ .

Strawberries are a labor-intensive crop with a high rate of repetitive strain injuries for workers<sup>23</sup>, and the quality of hand labor is a determinant of price at the marketplace<sup>6</sup>. Strawberries have a higher rate of pesticide application than almost any other crop and exposure to these chemicals contributes to both acute and chronic health problems<sup>24</sup>.

Research has shown that a domestic fair trade type of labeling scheme could do much to improve wages and working conditions for strawberry workers. The AFL-CIO calculated that a retail price increase of just 5 cents could increase workers' wages by 40% or more<sup>25</sup>. The economic feasibility of such an increase has been demonstrated by Coastal Berry and Swanton Berry (an organic farm), which have contracts with the United Farm Workers union to provide higher wages and health benefits to workers in the industry<sup>26</sup>.

In addition, consumers may be less price-sensitive, and therefore more willing to pay a premium for fresh strawberries, because they are not a staple food. Studies of willingness to pay for organic foods indicate that consumers will pay higher price premiums for more perishable products, such as fruits and vegetables, than for less perishable products like cereals<sup>27</sup>. How willing are US consumers to pay a fair trade premium for domestic strawberries?

# **Study Methods**

This question was addressed in a national survey of the United States conducted in the spring of 2006. The eightpage survey booklet on food issues was mailed to 1000 randomly selected respondents in the United States. The directions specified that the booklet should be filled out by the primary food purchaser for the household. Names and addresses were purchased from the marketing firm USADATA. We employed the Tailored Design Method<sup>28</sup>, which involved a pre-notice letter, a survey booklet with a \$1 bill incentive, a reminder postcard and two replacement survey mailings to nonresponders, the final utilizing Priority Mail. The response rate was 51% (476 respondents excluding 62 members of the sample with undeliverable addresses).

We used a dichotomous (or discrete) choice survey question to elicit willingness to pay. This format, which involves a yes/no response to a defined amount, more closely resembles the kinds of choices people make in retail food environments than would an open-ended question<sup>29</sup>. However, this dichotomous format does not provide a direct measure of willingness to pay; instead it must be estimated with statistical models<sup>30</sup>.

The question was worded 'If a pint of strawberries cost \$1.50, would you be willing to pay **X** more for a pint of strawberries that **guaranteed** a living wage and safe working conditions for farmworkers?' The amount X varied depending on the version of the survey. There were four different versions of the instrument, distributed as follows: 20% were asked if they would pay 5 cents more, 30% were asked if they would pay 25 cents more, 30% were asked if they would pay 50 cents more, and 20% were asked if they would pay \$1.50 more. The question response options were 'yes,' 'no' or 'not sure'. Response rates in these four groups were not significantly different (P < 0.05), and ranged from 49.6 to 53.4%.

The data were analyzed in multilevel logistic regression models, with individuals at one level nested inside the four bid amounts at a higher level<sup>31</sup>. The analysis was performed with the software HLM  $6^{32}$ . A 'yes' response for the given price option was the dependent variable. Level 1 of the analysis included this outcome and additional predictor variables measured at the individual level. Level 2 of the analysis was composed of the four different price groupings. For missing data on independent variables, multiple imputation of five datasets (m = 5) was performed using the program Amelia II<sup>33</sup>, and analyzed with HLM's multiple imputation function. The first model estimated median willingness to pay for the sample. We then used bivariate models to estimate differences in willingness to pay for demographic and purchasing behavior variables. Our final model included all of the demographic and behavior variables, to simultaneously control for their influence on willingness to pay.

#### Results

The demographics of the survey respondents are presented in Table 2 in comparison to US Census estimates. Respondents were more likely to be older, wealthier, of non-Hispanic white ethnicity and to have higher educational attainment than the general population. Descriptive statistics for the variables used in the analysis are reported in Table 3. There were more women (54%) than men (41%) in the sample, which was expected since women are more likely to be the primary household food purchasers. More than 17% of respondents reported

 Table 2. Survey respondent demographics compared with US Census estimates.

Characteristic	Responder	US Census 2005 estimates <sup>1</sup>		
Women	53.8%	(256)	50.7%	
Men	41.0%	(195)		
Age 65+	17.4%	(83)	12.4%	
Asian	3.8%	(18)	4.3%	
Latino	6.3%	(30)	14.4%	
African-American	6.1%	(29)	12.8%	
Native American	1.9%	(9)	1.0%	
Other	4.0%	(19)		
White, non-Hispanic	76.5%	(365)	66.9%	
Household size	2.62	(mean)	2.59	
Median income	50K to 75K	(mean)	\$43, 318	
High school diploma	91.4%	(435)	80.4%	
Bachelor's degree	39.7%	(189)	24.4%	
Sample size	476		296, 410, 404	
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<sup>1</sup> Source: US Census Bureau (2007)<sup>34</sup>.

**Table 3.** Descriptive statistics for variables in the analyses (dichotomous unless noted).

			Percent
	Mean	SD	missing
Gender			5.3
Men	41.0		
Women	53.8		
Age			
Years (continuous variable)	51.6	16.0	7.4
Ethnicity			1.5
White, non-Hispanic	76.5		
Asian	3.8		
African-American	6.1		
American Indian	1.9		
Latino	6.3		
Other	4.0		
Income			11.3
Low income (<\$35K)	26.9		
Middle income (\$35K to \$75K)	34.9		
High income (\$75K+)	26.8		
Education			4.2
High school or less	25.6		
Some college/associate degree	30.5		
College	25.4		
Graduate school	14.3		
Purchasing behaviors			
Frequent organic	17.4		4.0
Consider environment (7-point scale)	4.2	1.7	6.7
( rome searc)			

n = 476

purchasing organic food frequently, which we defined as at least once a week. For a question that asked if respondents consider the environment when making purchases on a 7-point scale ranging from strongly agree

Table 4. Responses to willingness to pay question.

Price premium	Yes (%)	No (%)	Not sure (%)	Total
5 cents	83 (87.4)	5 (5.3)	7 (7.4)	95
25 cents	92 (67.6)	19 (14.0)	25 (18.4)	136
50 cents	91 (67.9)	14 (10.4)	29 (21.6)	134
\$1.50	32 (34.8)	25 (27.2)	35 (38.0)	92
n = 457				

(1) to strongly disagree (7), the mean was 4.2, or just slight disagreement.

# How much will consumers pay for domestic fair trade?

Responses to the willingness to pay question are reported in Table 4. For the 5-cent price premium, 87.4% of respondents were willing to pay more. The percentage declined to approximately 68% for both the 25- and 50cent premiums, and to less than 35% for the \$1.50 price premium. The percentage of both 'no' and 'not sure' responses increased approximately 5 times from the lowest price premium to the highest. While 5.3% were unwilling to pay 5 cents more, 27.2% were unwilling to pay \$1.50 more. The 'not sure' responses increased from 7.4 to 38% for the same amounts.

Results of the multilevel model with no predictor variables are shown in Table 5. The median willingness to pay for domestic fair trade strawberries was \$1.02 more than the base price of \$1.50 (+68%).

# Who is most willing to pay for domestic fair trade?

Bivariate associations with willingness to pay a price premium are listed in Table 6. Most other ethnic groups were more willing than white, non-Hispanic respondents to pay more. The largest difference observed between ethnic groups was that Asian/Pacific Islanders were willing to pay 25% more than white, non-Hispanic respondents. There was a similar strength of association for women—they were willing to pay 37 cents (25%) more than men.

The variables associated with the largest differences in willingness to pay were the two purchasing behaviors.

Those who consider the environment when making purchases were willing to pay 21 cents (14%) more for every one unit increase on this 7-point scale. For example, those who strongly agreed with a statement that they engage in this behavior are estimated to be willing to pay \$1.47 more than those who strongly disagree. Frequent organic consumers also demonstrated notable differences; they were 3 times more likely than other consumers to be willing to pay more for domestic fair trade, an estimated 69 cents more.

The full model, which controls for all of these variables simultaneously, is reported in Table 7. Most relationships were weaker when compared with the bivariate models, with the exception of education and some ethnic groups. When controlling for other variables in the model, there was a stronger negative relationship between years of education and willingness to pay a price premium. Respondents with postgraduate degrees were willing to pay a median of 56 cents less than respondents without schooling beyond high school. Those with some college or an associate degree were not as willing to pay more in comparison to respondents who had never attended college (19% less). College graduates demonstrated a similar association, though the difference between this group and those with a high school education was weaker and did not reach conventional levels of statistical significance (13% less, P = 0.19). Asian/Pacific Islanders were predicted to be willing to pay a median of 39 cents more than white, non-Hispanics, an increase of 2 cents when compared with the bivariate model. In the 'other' ethnic category, willingness to pay went from 9 cents less than white, non-Hispanics in the bivariate model, to 12 cents less in the full model.

Purchasing behaviors maintained the strongest associations with willingness to pay more, although the relationships were slightly attenuated when compared with those reported in the bivariate models. Respondents who stated that they purchased organic foods at least weekly were willing to pay 42% more for a living wage and safe working conditions than those who do not, compared with 46% in the bivariate model. For considering the environment when making purchases, each one-unit increase on this scale was associated with an 11% increase in willingness to pay a premium, compared with 14% in the bivariate analysis. Those who strongly agree with this question are

Table 5. Multilevel logistic regression model of willingness to pay

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Fixed effects	Coefficient	OR	95% CI	Р	Cents	% More			
Level 1 Intercept	1.491			0.01	102	68			
Level 2 Price	-0.015	0.99	0.98–0.99	0.00					
Random effects	Variance compo	nent		Р					
Intercept variance	0.366			0.02					

n = 457

Table 6.	Bivariate	multilevel	logistic	regression	models	of wil	llingness	to	pay	y.
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	Coefficient	OR	95% CI	Р	Cents	% More
Gender						
Men (reference)						
Women	0.552	1.74	1.65-6.81	0.00	37	25
Age						
Years	-0.002	0.99	0.98-1.01	0.67	0	0
Ethnicity						
White, non-Hispanic (reference)						
Asian/Pacific Islander	0.555	1.74	1.09-2.79	0.02	37	25
Latino/Hispanic	0.378	1.46	0.87-2.44	0.15	25	17
African-American/Black	0.300	1.35	0.53-3.45	0.53	20	13
Other	-0.142	0.87	0.61-1.23	0.42	-9	-6
Income						
Low income (reference)						
Middle income	-0.404	0.67	0.41-1.01	0.06	-27	-18
High income	-0.554	0.57	0.41-0.71	0.00	-37	-25
Education						
High school or less (reference)						
Some college/associate degree	-0.359	0.70	0.39-1.26	0.24	-24	-16
College graduate	-0.130	0.88	0.65-1.20	0.41	-9	-6
Postgraduate degree	-0.738	0.48	0.22-1.06	0.07	-50	- 33
Purchasing behaviors						
Frequent organic	1.097	3.00	1.36-6.62	0.01	69	46
Consider environment (7-point scale)	0.322	1.38	1.24–1.53	0.00	21	14

<sup>239</sup> 

*n* = 457

thus predicted to be willing to pay \$1.12 more than those who strongly disagree, after controlling for other variables.

Women were willing to pay a median of 12% more than men, half the difference noted in the bivariate model. The association between high income and willingness to pay was also weaker, but remained negative. Compared with the low-income group, those with annual household incomes above \$75,000 would pay a median of 29 cents less. Age was not associated with willingness to pay for a living wage and safe working conditions.

#### Discussion

The two purchasing behavior variables, buying organic weekly and considering the environment, were associated with the highest percentage increases in willingness to pay for strawberries that embodied a living wage and safe working conditions for farmworkers. This suggests that efforts to establish domestic fair trade should begin by targeting retail outlets frequented by these types of consumers. Cooperative food stores and buying clubs are particularly promising options since they have contributed substantially to the growth of organic and international fair trade food sales, in large part due to the ethical commitments of their owners and customers<sup>35</sup>. Two-thirds of the participating retailers in the Local Fair Trade Network are food cooperatives<sup>18</sup>. However, if domestic fair trade is to expand beyond a small niche, it will need

to branch out into more mainstream outlets in the same way that international fair trade has done. Two possibilities include Whole Foods Market and Trader Joe's chains, both of which stock substantial amounts of organic and international fair trade products<sup>36,37</sup>.

Some of the most interesting associations were that respondents with the most years of education and the highest incomes, when controlling for other variables, were less willing to pay for domestic fair trade criteria. This goes against conventional wisdom that more affluent people will pay more and that more educated people are more interested in sustainability. Definitely, those with higher incomes could more easily afford a price premium since they pay a much lower percentage of their incomes for food than do low-income people. We can only speculate that these findings may be in part due to the socio-economic status differences that create social distance from those with lower incomes and/or fewer years of education. That is, farmworkers may receive less sympathy from those who may not relate to their plight<sup>38</sup>. The results may have been different if we had also included criteria related to a fair price for farmers, given the idealization of the family farm<sup>16,39</sup> and the pervasiveness of farm-centric agrarian ideologies in the USA<sup>6</sup>.

One well-known limitation of willingness to pay studies has been termed the 'attitude behavior gap', which means that purchasing behaviors do not correspond to stated intentions<sup>4,40</sup>. Typically, stated willingness to pay is higher than actual behaviors<sup>41</sup>. For example, the market share of

Table 7. Multivariate multilevel logistic regression model of willingness to pay.

Fixed effects	Coefficient	OR	95% CI	Р	Cents	% More
Level 1						
Intercept	1.145			0.13	64	43
Gender						
Men (reference)						
Women	0.315	1.37	1.06-1.76	0.02	18	12
Age						
Years	-0.007	0.99	0.98-1.01	0.31	0	0
Ethnicity						
White, non-Hispanic (reference)						
Asian/Pacific Islander	0.708	2.03	1.19-3.47	0.01	39	26
Latino/Hispanic	0.081	1.08	0.69-1.70	0.72	5	3
African-American/Black	0.077	1.08	0.56-2.08	0.82	4	3
Other	-0.214	0.81	0.58-1.12	0.20	-12	- 8
Income						
Low income (reference)						
Middle income	-0.254	0.78	0.47-1.28	0.32	-14	-9
High income	-0.514	0.60	0.40-0.89	0.01	-29	-19
Education						
High school or less (reference)						
Some college/associate degree	-0.503	0.60	0.40-0.91	0.02	-28	-19
College graduate	-0.357	0.70	0.41-1.20	0.19	-20	-13
Postgraduate degree	-1.000	0.37	0.18-0.75	0.01	- 56	-37
Purchasing behaviors						
Frequent organic	1.130	3.09	1.23-7.77	0.02	63	42
Consider environment (7-point scale)	0.291	1.34	1.21-1.48	0.00	16	11
Level 2						
Price	-0.018	0.98	0.98–0.99	0.00		
Random effects	Variance comp	onent		Р		
Intercept variance	0.373			0.03		

*n* = 457

fair trade products in most European countries is far lower than the level of support expressed in surveys<sup>42</sup>. However, a high willingness to pay among even a small proportion of the population may indicate the potential for a highly profitable niche market<sup>30</sup>.

Another limitation of this study is that we chose a product that was amenable to domestic fair trade criteria and marketing, with attributes that would make it more likely that consumers would be willing to pay more than the standard price (i.e. a fresh fruit considered to be a nonessential or pleasure food). Therefore these results should not be taken to mean that consumers are willing to pay more for domestic fair trade versions of all food products.

# Conclusions

Consumers in the United States indicate that they are willing to pay substantially more for strawberries that embody a living wage and safe working conditions. Considering the environment when making purchases, or purchasing organic foods on a weekly basis was associated with a willingness to pay the largest additional amounts for these attributes. While these results should be interpreted with caution given the well-known gap between attitudes and actual behaviors, they do express a promising potential market for domestic fair trade efforts.

Future research is needed to evaluate the effectiveness and economic viability of specific projects such the Local Fair Trade Network and Equal Exchange's 'fairly traded' products to improve conditions for farmers and farmworkers. In addition, assessing willingness to pay for other food products is needed, as this is likely to differ substantially for different commodities. It would also be interesting to compare support for international and domestic fair trade and to study whether there are differential levels of support for price premiums for farmers and farmworkers. Finally, qualitative research is needed to shed light on the reasons underlying the demographic differences such as income and education that affect willingness to pay a price premium for domestic fair trade. Consumer willingness to pay for domestic 'fair trade'

The current level of interest expressed in domestic fair trade is impressive, particularly given the fledgling nature of these efforts and the limited awareness of international fair trade in the United States. Our results indicate that domestic fair trade labeling schemes may be a viable means of addressing some of the inequities in the US food system. Certainly, market-based approaches to resolving agrifood system issues have both promise and pitfalls, as we have seen with the organic label<sup>43,44</sup>. For example, willingness to pay depends on ability to pay, and not all have the  $ability^{45}$ . However, research on demographics associated with purchasing organic fresh produce (which is much more abundant than for other ecolabels, such as fair trade) indicates that income has become essentially irrelevantpeople from all income levels are almost equally likely to be willing to pay price premiums averaging up to 78% more than conventional produce<sup>46</sup>. Even so, if the number of willing buyers constrains the size of the market to a small niche, only a limited number of farmers and farmworkers will realize the price premium<sup>47</sup>. While fair trade and organic labels often fall short of their ideals in practice, they do have positive impacts and the potential to lead to more transformative changes as part of a more comprehensive strategy for achieving social justice and ecological sustainability<sup>43–45, 47–49</sup>. Our study shows strong potential support for including domestic fair trade as part of an overall strategy for working toward social justice in the agrifood system.

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