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# Gender differences in pro-social behaviour: the case of fair-trade food consumers

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## *Abstract*

Objective of this paper is to analyse the presence of gender differences in the purchase motivations of Fair Trade (FT) food products sold in the Italian World Shops (WS). At this end, a questionnaire has been distributed to a sample of consumers in four Italian regions. A bivariate ordered probit analysis has been performed in order to identify the determinants of the two main ethical motivations in the purchase: worker guarantees and solidarity. The variables used as determinants are individual and municipal characteristics. Among individual characteristics, gender is significant; among the municipal characteristics, the rate of female job market participation is also significant. These results give evidence of a gender gap in the preferences for public goods

## **Keywords**

ethical consumerism, gender preferences, fair trade.

## **Jel Classification**

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## 1. Introduction

Many authors have argued that women vote differently than men on the basis of women preference for government as a potential insurer for low income. Since women tend to have lower incomes, they benefit more from various government programs that redistribute income to the poor, such as progressive taxation (Abrams and Settle, 1999; Lott and Kenny, 1999; Aidt et al. 2006, 2008; Miller, 2008; Bertocchi, forthcoming).

The source of these differences in views on the role government should play is not completely clear. Women appear to be more risk averse than men and to place relatively greater weight on the child welfare and on the provision of public goods.

Marriage provides an economic basis for men's and women's preferences for different policies. It typically encourages men to accumulate market capital and leads women to acquire household skills and shoulder most of the child-rearing responsibilities. However, divorced women often have been unable to recoup the full compensation for their family-specific investments through court-ordered alimony payments. Hence, single women as well as women who anticipate that they may become single may prefer a more progressive tax system and more wealth transfers to low-income people as an alternative to a share of a husband's uncertain future income.

These hypotheses have been tested by analysing the effect of women suffrage on the path of both size and scope of government spending over time in US (Lott and Kenny, 1999; Miller, 2008) and in Europe (Abrams and Settle, 1999; Aidt et al. 2006, 2008; Bertocchi, forthcoming).

While the evidence of a positive impact on the size of government spending is not unanimous, the effect of women's suffrage on the scope of government spending is confirmed since women support some types of expenditures such as welfare, education, public health, environment and culture against military and security expenditures. Abrams and Settle (1999) show that women's suffrage raised the overall size of the Swiss government, and that this occurred through welfare spending, but not government consumption. Aidt *et al.* (2006) confirm that female suffrage had a positive impact in Europe, through spending on collective goods such health, education and welfare while Aidt and Dallal (2008) present further evidence on a long-run impact of women's suffrage on spending in such collective goods. Miller (2008) shows that suffrage laws in the US were followed by large increases in spending, particularly for municipal public health.

In Bertocchi's model (forthcoming), women's preferences for public goods are higher than men's and proportional to the average gender wage gap; they will remain higher than men's, even for equal wages.

However, women can also vote "with their wallet" by using their power as consumers: Micheletti (2003), Lamb (2007) and Terragni (2007) underlines that better educated middle class women played an important role in the development of the modern ethical consumerism.

Objective of this paper is to contribute to the understanding of the question whether women display higher preferences for public goods by analysing the purchase motivations of Fair Trade (FT) food products sold in the Italian specialized retailers, called World Shops (WS). FT is an initiative promoted by European and North American no-profit organizations aimed to fight poverty traps with trade diversification benefits and the creation of an alternative value chain which provide higher economic value and social benefits to marginalized producers. The opportunity of buying FT products gives to consumers the capacity of addressing directly social imbalances with market transactions.

In order to cope with this question, a questionnaire has been distributed to a sample of 780 consumers in four Italian regions, asking the main motivations in purchase of Fair Trade (FT) food products. A bivariate ordered probit analysis has been performed in order to identify the determinants of the two main ethical motivations: worker guarantees and solidarity. The variables used as determinants are individual and municipal characteristics. Among the individual characteristics, gender is significant while, among the municipal characteristics, the rate of female job market participation rate is significant. These results give evidence of a gender gap in the preferences for public goods.

## 2. The descriptive analysis

The questionnaire was distributed in four Italian regions: for budget constraints, it was initially distributed only in Emilia Romagna and Campania and, after a year, in Puglia and Calabria. The provinces chosen to carry out the study are those with the highest number of World Shops, where the Fair Trade can be considered popular within the municipalities. Particular care was given to the involvement of occasional customers in the WS.

The questionnaire is divided into sections concerning: purchasing habits, relation with non-FT products, ethical activities and consumer socio-economic characteristics. A specific part is devoted to the knowledge of purchasing motivations: through the Likert scale, respondents were asked to give a score from 1 to 5 to a series of purchasing motivations.

### A. Purchasing habits

With regards to the familiarity and knowledge modes as to FT products, we found out that most of respondents have already acquired some products at the World Shops (table 1). As to the knowledge modes, we got multiple answers. The most frequent modes are: “friends” and “getting into a shop”. Instead, the media have little influence on the promotion of fair trade; that is not surprising since WSs have deliberately chosen not to use conventional promotional channels and only recently the media start caring for this phenomenon.

Table 1 – Fair Trade knowledge

Questions	%
<b>Is it the first time that you buy FT products?</b>	
<i>No</i>	92
<i>Yes</i>	8
<b>Total</b>	100
<b>How have you known FT products?*</b>	
<i>Getting into a shop</i>	35
<i>Friends</i>	39
<i>Relatives</i>	10
<i>Associations/group</i>	20
<i>Newspapers/magazines</i>	8
<i>Radio/TV</i>	3
<i>Fairs/exhibitions/local markets</i>	14
<i>Internet</i>	1

\*Multiple replies were admitted

The second aspect concerns the purchasing habits, as in table 2. In particular, information were collected relative to loyalty to the product, purchasing frequency, amount of the last purchase, kind of purchased products and relation with traditional products (non-FT). From table 2, which shows the purchasing habits, two subgroups can be identified: regular customers, who make at least one purchase per month, and occasional consumers, who buy FT products only when the opportunity comes along and who represent about a third of the respondents of the sample. The figure concerning the latest expenditure amount shows that most of consumers spend between 5 and 10 €. Table 3 shows that there is no expenditure prevailing on the others which confirms the presence of occasional consumers. With reference to the absolute frequencies, the most frequently purchased foodstuffs are: chocolate, tea/herbal tea and coffee. Last, the table also shows that the percentages of consumers acquiring daily products such as pasta and rice are low; that proves that WSs find hard to sell these products that are not perfect substitute, to the consumers’ eyes, of non-FT branded traditional products. The

loyalty rate of consumers to FT branded products may be drawn from table 3: a clear-cut majority of respondents also buys non-FT branded products.

Table 2 – Purchase habits

<b>Questions</b>			
<b>How often do you FT products?</b>	<b>%</b>	<b>Which product do you buy?*</b>	
<i>more than once in a week</i>	9	<i>Coffee</i>	47
<i>once in a week</i>	14	<i>Tea/herbal tea</i>	60
<i>more than once in a month</i>	20	<i>Chocolate</i>	69
<i>once in a month</i>	9	<i>Cacao</i>	26
<i>for a party</i>	9	<i>Sugar</i>	30
<i>Sometimes</i>	32	<i>Marmalade/honey</i>	33
<i>Seldom</i>	6	<i>Rice</i>	20
<b>Total</b>	100	<i>Pasta</i>	14
<b>Which is the amount of the last purchase?</b>		<i>Other food products</i>	43
<i>&lt; 5 €</i>	17	<i>Craft-made products</i>	79
<i>5 - 10 €</i>	26	<i>Other products</i>	25
<i>10 – 15 €</i>	24		
<i>15 - 25 €</i>	20		
<i>&gt; 25 €</i>	13		
<b>Total</b>	100		

\*Multiple replies were admitted

Table 3 shows that the traditional products are bought because FT products are not easily found. Besides, 22% of respondents are not loyal because they are not always willing to pay a higher price for these products.

Table 3 – Relationship with traditional products

<b>Questions</b>	
<b><i>Do you also buy non-FT products?</i></b>	<b>%</b>
<i>No</i>	21
<i>Yes</i>	79
<b>Total</b>	100
<b><i>If yes, why?</i></b>	
<i>I am not always willing to pay a higher price</i>	22
<i>It is easier to find</i>	36
<i>I like to shift from one to another</i>	20
<i>Not all in my family prefer FT products</i>	16
<i>Other</i>	6

### B. Social responsibility of respondents

Table 4 reports the participation rate in highly-ethical activities and the ethical motivation in the purchase of FT food products. The less frequent ethical activity is the participation to the Groups of Fair Purchasing (FPG)<sup>1</sup> with a slight share of consumers following this critical consumption initiative.

Table 4 – Social responsibility

Questions			
<b>FPG membership</b>	%	<b>Boycotting</b>	%
<i>No</i>	88	<i>No</i>	34
<i>Yes</i>	12	<i>Yes</i>	66
<b>Responsible tourism</b>		<b>Membership of associations</b>	
<i>No</i>	68	<i>No</i>	42
<i>Yes</i>	32	<i>Yes</i>	58
<b>Ethical savings</b>		<b>Purchase ethical motivations</b>	
<i>No</i>	65	<i>Worker guarantee</i>	79
<i>Yes</i>	35	<i>Solidarity</i>	74

The table also shows the rate of participation in other activities considered as ethical activities. Particularly, there is quite a good participation in boycotting activities and most of respondents are members of groups or associations. Last, one third of respondents practice responsible tourism activities and ethical saving activities. Most respondents buy FT food products for the guarantees on worker conditions and solidarity reasons.

### C. Socio-economic characteristics

Table 5 shows the socio-economic characteristics of respondents. They are mainly women, with a diploma and aged between 20 and 40. As to the profession, most of the respondents are students or employees. Last, the table shows that the prevailing gross annual income is between 10 and 30 thousand € per family.

<sup>1</sup> People who meet to buy wholesale food products and commodities to be re-distributed among them, looking for a direct contact with producers.

Table 5 - Socio-economic characteristics of respondents

<b>Questions</b>			
<b>Gender</b>	<b>%</b>	<b>Job-market condition</b>	<b>%</b>
<i>Female</i>	60	<i>Craftsman</i>	3
<i>Male</i>	40	<i>Tradesman</i>	3
		<i>White collar</i>	17
<b>Age</b>		<i>Blue collar</i>	5
<i>up to 20 years old</i>	11	<i>Housewife</i>	4
<i>21 - 30 years old</i>	42	<i>Student</i>	31
<i>31 - 40 years old</i>	26	<i>Unemployed</i>	7
<i>41 - 50 years old</i>	12	<i>Retired</i>	4
<i>51 - 60 years old</i>	6	<i>Occasional worker</i>	3
<i>&gt; 60 years old</i>	4	<i>Professional</i>	7
		<i>Teacher</i>	8
		<i>Doctor</i>	5
<b>Annual gross household income</b>		<i>Manager</i>	1
<i>&lt; 5 th €</i>	5	<i>Other</i>	4
<i>5 - 10 th €</i>	11	<b>Educational level</b>	
<i>10 - 20 th €</i>	30	<i>Primary school</i>	1
<i>20 - 30 th €</i>	29	<i>Secondary school</i>	11
<i>30 - 40 th €</i>	18	<i>High school</i>	55
<i>40 - 50 th €</i>	4	<i>University degree</i>	27
<i>&gt; 50 th €</i>	1	<i>Post-bachelor studies</i>	5
<b>Total</b>	<b>100</b>		<b>100</b>

#### D. Territorial characteristics

Respondents were asked to indicate the municipality where they live. Data on the demographic, socio-economic, cultural conditions for the 130 municipalities indicated were gathered from several sources, mainly the Census, in order to characterize the environment where socially responsible live and to identify which territorial conditions positively influence pro-social behaviour. The descriptive statistics are reported in table 6 together with variables referred to the WS such as the CTM (the main Italian FT importing channel) and the WS association membership dummies, respectively CTM and WSA.

Table 6 –Territorial characteristics

<b>Variables</b>	<b>Mean</b>	<b>Std. Dev.</b>
<b>Demographics</b>		
Population (1000 inh.)	129.5	224.0
Density (inh/kmq)	1684.4	2788.9
Present population over residents (%)	100.3	2.4
Urbanized municipality (100 inh./kmq < density <500 inh./kmq )	0.5	0.5
Highly urbanized municipality (density > 500 inh./km )	0.5	0.5
Metropolis (> 1 ml inhabitants)	0.0	0.2
<b>Economic conditions</b>		
Municipal mean income (1000 €)	15.6	3.6
Unemployment rate (%)	18.2	8.8
<b>Social capital</b>		
Senate voting rate (%)	81.4	6.2
Tax-payer donations to municipal no-profit organizations (%)	2.8	2.3
Cooperative members (%)	1.3	0.5
No-profit organizations (No.)	0.4	0.9
<b>Women economic power</b>		
Female participation rate (%)	40.7	17.5
Female commuting rate (%)	57.6	12.6
Divorce rate (%)	4.9	2.5
<b>Culture</b>		
Municipal mean education years (No.)	8.1	0.8
Museums (No.)	0.7	2.1
University dummy	0.3	0.4
<b>WS characteristics</b>		
WS customers of the same municipality (%)	95.7	80.8
WS age (years)	5.7	3.9
WS presence dummy	0.8	0.4
CTM dummy	0.4	0.5
WSA dummy	0.2	0.4
Distance from the WS (km)	13.5	40.2
<b>Time dummy</b>		
Distribution questionnaire year	0.5	0.5



### 3. The regression results

Table 7 – Bivariate ordered probit results

Independent variables	workers' guarantees		solidarity	
	Coef.	z	Coef.	z
<i>Dependant variable</i>				
Population	0.01	3.75***	0.00	2.01**
Present pop./residents	-0.03	-0.73	-0.14	-2.92***
Female commuting rate	-0.20	-4.71***	-0.04	-0.92
Female participation rate	0.23	5.47***	0.08	1.79*
Density	0.00	-1.79*	0.00	-0.57
Divorce rate	-0.20	-2.21**	-0.30	-3.63***
Gender dummy	-0.17	-1.47	-0.16	-1.79*
Unemployment rate	0.09	4.2***	0.05	2.14**
WS customers of the same municipality	0.00	-0.92	0.00	1.97**
Distance fom the WS	0.00	2.13**	0.00	-1.14
Mean municipal income	-0.18	-3.18***	0.04	0.64
Senate voting rate	-0.04	-2.15**	-0.04	-2.2**
No-profit organizations	-0.20	-1.26	0.07	0.52
No-profit org. taxes donation	0.00	0.17	-0.05	-1.63*
Cooperative members	0.02	0.17	0.47	2.89***
Museums	-0.22	-2.45***	-0.05	-0.9
Individual education year	0.03	2.51***	0.03	2.54***
Municipal mean education years	0.66	3.42***	0.24	1.53
WS age	0.03	1.30	0.01	0.23
WS presence	-0.25	-1.59	-0.21	-1.4
University dummy	-0.10	-0.47	0.19	1.11
Puglia dummy	2.32	2.81***	-1.02	-1.29
Emilia Romagna dummy	-0.49	-0.77	-0.96	-1.88*
Campania dummy	0.95	1.26	-1.23	-2.02**
Calabria dummy	1.46	1.56	-1.26	-1.35
Year dummy	-1.68	-3.3***	-0.28	-0.52
CTM dummy	-0.08	-0.57	0.08	0.58
WSA dummy	0.17	1.02	0.04	0.23
Urbanized municipality dummy	1.95	4.55***	1.37	3.51***
Highly urbanized municipality dummy	2.11	4.56***	1.47	3.50***
Metropolis dummy	-4.43	-2.58***	-2.78	-1.92*
Number of obs.	780			
LogL	-1102.95			
Wald test of joint signif. chi2(31)	412.48			
Rho	0.56	14.14***		
Wald test of indep. eqns. chi2(1)	119.09			

\*\*\* significant at 1% level \*\*significant at 5% \* significant at 10%

Table 7 show the results of the bivariate ordered probit regression. First of all, the fit is good since the variables are jointly significant, as it is possible to judge from the value of the Wald test. The bivariate specification is supported by the data since the value of the correlation coefficient between two equation errors is high (0.56) and statistically significant, as shown from the Wald test results. The standard errors are robust, not reported in the table, because have been clustered at the municipality level.

It is interesting to observe that municipal determinants are more important than individual determinants in the explanation of pro-social behaviour: the number of municipal variables, which are significant, is huge.

Among the individual determinants, the only variable to be significant is education, the gender dummy, which is -1 for a woman, is not significant for the worker guarantee motivation and is weakly significant for the solidarity motivation. The variables income and age were not significant and omitted in the specification presented here in order to increase the number of observations because of missing values.

Among municipal determinants, it is interesting to observe that the determinants for the workers guarantees do not coincide with those of the solidarity value.

The positive determinants of the motivation worker guarantees are: the mean municipal education level, the population size, the medium and highly urbanized municipality dummies, the unemployment rate and the female job market participation rate, the distance of the municipality from the WS and the Puglia region dummy. The negative determinants are: the metropolis dummy, the density, the mean municipal income, the Senate voting rate, the year when the questionnaire was distributed.

The positive determinants of the motivation solidarity are the medium and highly urbanized municipality dummies and the cooperative member percentage while the female job market participation rate is weakly significant. The most significant negative determinants are the percentage of present population on residents and the divorce rate.

The WS variables are not significant.

Table 8 - Marginal effects for outcome (5,5):  $y = 0.67$

Indipendant variables	dy/dx	z
Population	0.002	3.36***
Present pop./residents	-0.04	-2.37**
Female commuting rate	-0.04	-2.57***
Female participation rate	0.05	3.65***
Density	0.00	-1.32
Divorce rate	-0.10	-3.62***
Gender dummy	-0.06	-1.97**
Unemployment rate	0.03	3.3***
WS customers of the same municipality	0.00	1.47
Distance fom the WS	0.00	0.42
Mean municipal income	-0.02	-0.97
Senate voting rate	-0.02	-2.46***
No-profit organizations	-0.01	-0.25
No-profit org. tax-payer donations	-0.01	-1.37
Cooperative members	0.12	2.51***
Museums	-0.05	-2.13**
Individual education years	0.01	3.72***
Mean municipal education years	0.15	2.71***
WS age	0.01	0.62
WS presence dummy	-0.08	-1.78*
University dummy	0.03	0.55
Puglia dummy	0.09	0.33
Emilia Romagna dummy	-0.32	-1.65*
Campania dummy	-0.27	-1.18
Calabria dummy	-0.38	-1.18
Year dummy	-0.33	-2.48***
CTM dummy	0.01	0.11
WSA dummy	0.03	0.56
Urbanized municipality dummy	0.55	5.4***
Highly urbanized municipality dummy	0.61	5.66***
Metropoly dummy	-0.73	-28.8***

\*\*\* significant at 1% level \*\*significant at 5% \* significant at 10%

Table 8 reports the marginal effects calculate for the event that the respondent gave the maximum score to both the ethical motivations. The gender variable is significant and with the expected sign, thus supporting the existence of a gender gap in the preferences for public goods. This result is reinforced by the positive and significant effect of the female participation rate and by the negative and significant effect of both the divorce rate and the female commuting rate: a stronger economic

female power in the municipality seems to be favourable to pro-social behaviour and conducive to socially responsible values.

It is interesting to observe that the impact of the mean number of education years in the municipality is much stronger than that of the individual: one year of further education has a marginal effect of 0.15 for the municipal level and a marginal effect of 0.01 for the individual. Among the social capital determinants, the traditional indicators of the civic sense, such as the Senate voting rate, do not display the expected impact, since socially responsible consumers do not trust in the politicians, or are not significant, in the case of the no-profit organizations presence. Instead, the presence of cooperative members, among the municipal workers, displays a significant impact with a marginal effect equal to 0.12.

The main deterrent of pro-social behaviour is congestion: living in a metropolis has a marginal effect equal to -0.75 while living in a municipality which is medium or highly urbanized seems to facilitate social interactions, in any case there is evidence of scale economy in the diffusion of socially responsible values since the population variable is significant.

#### 4. Conclusions

Objective of this paper is to analyse the presence of gender differences in the purchase motivations of Fair Trade (FT) food products sold in the Italian World Shops (WS). At this end, a questionnaire has been distributed to a sample of consumers in four Italian regions. A bivariate ordered probit analysis has been performed in order to identify the determinants of the two main ethical motivations in the purchase: worker guarantees and solidarity. The variables used as determinants are individual and municipal characteristics. Among individual characteristics, gender is significant; among the municipal characteristics, the rate of female job market participation is also significant and positive while both the divorce rate and the female commuting rate are negative and significant: a stronger economic female power in the municipality seems to be favourable to pro-social behaviour and conducive to socially responsible values. These results give evidence of a gender gap in the preferences for public goods.

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