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LEONARDO BECCHETTI, FURIO ROSATI

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# **Global social preferences and the demand for socially responsible products: empirical evidence from a pilot study on fair trade consumers**

Leonardo Becchetti  
*University of Rome Tor Vergata*

Furio Rosati  
*University of Rome Tor Vergata*

We analyze behaviour and motivations of a sample of about one thousand consumers purchasing “fair trade (FT) goods”, i. e. food and artisan goods which include socially responsible (SR) characteristics and a price premium for primary product producers with respect to equivalent non FT products. By estimating a simultaneous two-equation treatment effect model we find that FT products have less than unit income elasticity and their demand is negatively (positively) correlated with geographical distance from the nearest shop (age and awareness of SR criteria). Awareness of SR criteria depends, in turn, on a series of factors (consumption habits, membership of volunteer associations) which, indirectly (via increased awareness), significantly affect consumption.

We also measure consumers’ willingness to pay in excess for the SR features of FT products with a contingent evaluation approach and find that it is positively correlated with awareness of SR criteria.

Keywords: fair trade, social preferences, willingness to pay.

JEL Numbers: D109, F14, H23

## **1. Introduction**

The need to explain so many puzzles which cannot be fully accounted for by the standard self-interested preference approach has led economists to focus their attention on fields such as those of intrinsic motivation, non pecuniary incentives, inequity aversion and social preferences.

Some recent empirical achievements in these fields are leading to an integration of contract and principal-agent theories into a broader framework which considers not only pecuniary, but also non pecuniary incentives to individual behaviour (Fehr-Falk, 2002). Without this broadened perspective on the scope of human action it is hard to explain why pecuniary incentives may not work and, in some cases, they may even be crowded out by stronger non pecuniary motivations (Gneezy-Rustichini, 2000).

An important strand of this new literature analyses how choices of many workers (and consumers), which are apparently inconsistent with predictions from standard microeconomic theory, may be explained by social preferences.<sup>1</sup> Another parallel branch of this literature develops models of reciprocity which try to capture elements of inequity aversion (Fehr-Schmidt, 1999; Fehr and Schmidt, 2001; Sobel, 2002). The standard inequity aversion literature hinges on the problems of externalities among coworkers and argues that workers productivity is affected not just by personal, but also by relative wages (Agell and Lundborg, 1999; Bewley, 1999, Campbell and Kamlani, 1999).

The scope of our paper is to enlarge the research focus in the field of social preferences and inequity aversion by showing with an empirical analysis, on an *ad hoc* designed survey, how global market integration has led to a compression of distances and to an enlargement of the potential reference group considered when social preferences are formulated.<sup>2</sup>

In our case the focus is shifted from workers to consumers living in global markets. We argue that the progressive integration and reduction of virtual distances leads a share of “concerned” consumers to care about distant people, integrating them in the set of their relevant reference group.

In a parallel way, we may conceive our research as extending the concept of inequity aversion to the behaviour of consumers, by arguing that also their constrained optimisation, exactly as that of workers, is affected by inequity aversion. The difference in our case is, again, that the reference group is no longer represented by working colleagues, but by poor producers living in geographically distant countries, which globalisation makes virtually closer.

This extended framework of inequity aversion and social preference theories helps us to explain why these “socially responsible” consumers are willing to pay more, *coeteris paribus*, for products

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<sup>1</sup> According to a standard definition in the literature "A person exhibits social preferences if he does not only care about the material resources allocated to her but also cares about the material resources allocated to other relevant reference agents" (Fehr-Falk, 2002) or, more generally, [when a person cares about] “well-beings of other individuals, or a “fair” allocation among members in society, in addition to their own material benefits.” (Li, 2006).

<sup>2</sup> On the interaction between globalization and social values, see also Whalley (2005).

incorporating social goals and, specifically, for supporting inclusion of those who have not in distant countries of the world.

The experiment of our paper consists in building a survey and administering it to a sample of around one thousand “socially responsible” consumers buying “fair trade” products. FT products are food and artisan goods which include socially responsible (hereafter, also SR) characteristics and a price premium for primary product producers with respect to equivalent non FT products (see section 2 for a detailed definition of FT). These products therefore represent an interesting benchmark on which consumers’ SR preferences may be tested.

In our empirical analysis we start from the assumption that FT products are bundles of physical and social characteristics where knowledge of the latter has a significant and positive effect on demand of socially concerned consumers.

In the designed survey we are not only able to identify the determinants of expenditure in fair trade products and the relationship of the latter with traditional (income, distance) and intrinsic motivation related (knowledge and approval of socially responsible features of the products) factors. We are also able to measure directly the determinants of the willingness to pay in excess for the socially responsible features of such products, thereby extracting social preferences of the interviewed consumers.

The paper is divided into six sections (including introduction and conclusions). In the second section we illustrate the characteristics of fair trade products, focusing specifically on their social responsibility features. In the third section we illustrate the survey design and present descriptive findings. In the fourth section we illustrate descriptive findings. In the fifth section we comment our econometric results. The sixth section concludes.

## **2. A definition of fair trade**

Recent surveys seem to show that the reduction of distance induced by technological progress has increased the importance of global public goods and the sensitiveness of the public opinion toward social responsibility in general and, more specifically, toward the preservation of the environment and the fight to poverty in less developed countries.<sup>3</sup> This increased awareness has generated a series of “grassroot” welfare initiatives which focus on socially responsible (or socially concerned) saving and consumption.

One of them is built up by zero profit importers, distributors and retailers (called *fair traders*)<sup>4</sup> of food and artisan products which have been partially or wholly manufactured by poor rural communities in developing countries. To be labeled as such, fair trade products need to respect a series of social and environmental criteria. The criteria are the following:

i) definition of a “fair price”, which is higher than the market price paid on primary products by local intermediaries or transnationals in the food industry. This criterion does not necessarily represent a violation of market principles for two reasons. First, buyers of primary products are usually highly concentrated and exploit their market power to conclude transactions at prices which are far below the value of primary producers’ marginal product.<sup>5</sup> Second, fair trade products

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<sup>3</sup> The “2003 Corporate social responsibility monitor” finds that the amount of consumers looking at social responsibility in their choices jumped from 36 percent in 1999 to 62 percent in 2001 in Europe. In addition, more than one in five consumers reported having either rewarded or punished companies based on their perceived social performance and more than a quarter of share-owning Americans took into account ethical considerations when buying and selling stocks. The Social Investment Forum reports that in the US in 1999, there was more than \$2 trillion worth of assets invested in portfolios that used screens linked to the environment and social responsibility.

<sup>4</sup> The definition of fair trade considered in this paper is quite different from the traditional meaning of “Fair trade” used in the field of industrial organization. In this framework fair trade generally refers to the absence of duties, controls and dumping practices in international trade (for a similar use of the term see also Mendoza and Bahadur, 2002; Bhagwati, 1996; Stiglitz, 2002; Suranovic, 2002). The fair trade products we refer to in this paper are, on the contrary, food and artisan products which obtain the fair trade label since their production process follow some criteria for social and environmental sustainability, established by the movement of fair trade importers and retailers (Moore, 2004).

<sup>5</sup> Support for the existence of monopsonistic labour markets for unskilled workers, not just in LDCs but also in developed countries, is provided by several authors (Manning, 2003; Card and Krueger, 2000). Manning (2003) argues that labour markets may be thin not just in presence of a single employer, but also when employers are few and collude, or due to geographical distance and labour differentiation. The first two cases may well apply to producers in LDCs. Evidence of employers’

(exactly as “green” products) can be more properly considered as a kind of contingent good, that is, a bundle of standard quality characteristics and SR features, and therefore cannot be compared with traditional non SR products. From this point of view, the introduction of fair trade (hereafter also FT) products may be seen as reducing market incompleteness and increasing welfare of consumers with social preferences (or inequity aversion);<sup>6</sup> ii) opportunity of prefinancing production, thereby breaking the monopoly of local moneylenders which severely affects small uncollateralized producers; iii) price stabilization mechanisms which insulate risk averse primary product producers from the high volatility of commodity prices; iv) intervention to improve working conditions and to remove factors leading to child labour, not through a ban on products incorporating child labour, but through a monetary integration of their low household income; v) preferential inclusion in the fair trade distribution chain of projects reinvesting part of the surplus arising from the fair price in the provision of local public goods (such as health and education); vi) attention to the environmental sustainability of productive processes; vii) full information on how the price is determined along the value chain; viii) creation of long run relationships between importers and producers and provision of “business angel” and export services to the latter (i.e. information about consumers tastes in foreign markets, non tariff trade barriers, import regulations, etc.). With this respect fair trade may be conceived as a temporary income-support and inclusion mechanism, aimed to promote the transition to higher-return activities (Leclair 2002).

A final “hidden effect” of FT is its capacity of triggering imitation in social responsibility from traditional producers. Becchetti and Solferino (2003 and 2004) demonstrate that the entry of a FT producer may foster SR imitation of the profit maximising incumbent in duopolies in which competition is played on prices and social responsibility.

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excess market power in LDCs is provided by several empirical papers (Terrell and El Hamidi, 2001; Camargo, 1984; Gonzaga et al., 1999; Carneiro, 2002; Lemos, 2004).

<sup>6</sup> For the theoretical debate of the role and impact of Fair Trade at micro and aggregate level see also Becchetti and Solferino (2004), Hayes (2004) and Leclair (2002). Our empirical analysis will show in the next sections that this welfare effect is significant. Revealed preferences of interviewed

The European Fairtrade Labeling Organization, FLO, certified in 2003 315 organizations, representing almost 500 first level producer structures and around 1,500,000 families of farmers and workers from 40 countries (Moore 2004). FT products were sold by 2,800 dedicated outlets (called *world shops*) and by 57,000 supermarkets across Europe (7,000 in the US) (EFTA report, 2005)

FT products have achieved in 2005 significant market shares in specific segments such as the banana and honey market in Switzerland (47% and 14% respectively), the ground coffee market and the tea market in the UK (20% and 5% respectively) (EFTA report, 2005)

Consistently with predictions on FT indirect effects in the literature, the diffusion of forms of socially responsible consumption, such as fair trade, is accompanied by a wide range of imitation strategies enacted by traditional coffee producers or retailers (among them, Nestlè and Starbucks). In the meanwhile many more companies are starting advertising not only price and quality, but also their socially responsible actions<sup>7</sup> and social labeling and corporate responsibility is gradually becoming an important competitive feature in real and financial markets.

One of the examples of partial socially responsible imitation is given by the supermarkets decision of selling FT products. This example is particularly relevant as it helped FT importers to reduce distributional bottlenecks caused by the limited diffusion of dedicated FT outlets. The choice of distributing the products also through the large scale distribution has been criticized by some consumers arguing that *world shops* are more SR (they sell only FT products and actively promote information about them) than supermarkets (they include just a few FT products within their traditional product range and do not actively promote knowledge of FT criteria).

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consumers show that they buy SR products and that they are willing to pay in excess of market price for the SR features of FT products (see section 5).

<sup>7</sup> Corporate perception by consumers (90 percent of respondents) is by far the most selected item (against ethical values of managers, tax incentives and relationship with stakeholders) when a sample of interviewed socially responsible companies is asked about reasons for their socially responsible behaviour in the “2003 Corporate social responsibility monitor” (downloadable at <http://www.bsdglobal.com/issues/sr.asp>). This finding is consistent with our hypothesis that ethical imitation is today a relevant competitive feature in product markets.

Given the social relevance of this phenomenon the goal of our survey is that of studying for the first time characteristics of FT consumption, including a special focus on the competition between FT “pioneers” (*world shops*) and “partial imitators” (large scale distribution) and its impact on consumer habits and on the willingness to pay for FT products.

### **3. The survey**

The survey has been designed with the purpose of studying habits and characteristics of FT consumers. It has therefore an in built selection bias which excludes from the sample all consumers not purchasing FT products. If we also consider that the willingness to fill the questionnaire is expected to be positively related with individuals’ praise for FT initiatives, a second selection bias may add to the first one.

For these reasons our paper does not aim to evaluate the aggregate relevance of FT purchases.<sup>8</sup> Its first goal is to test for the existence of consumers with social preferences and inequity aversion which purchase fair trade products and are willing to pay in excess for these products with respect to equivalent ones without socially responsible characteristics. Its second goal is to investigate the determinants of expenditure in fair trade products, and, in particular, the impact on it of income, geographical distance and consumers’ awareness of the criteria described in the previous section. Its third one is to evaluate whether FT products are bundles of physical and SR characteristics by testing whether consumers awareness of the latter significantly increase consumption.

The questionnaire on which our survey is based (see Appendix C) includes questions about: i) purchasing habits of FT consumers; ii) awareness of the eight FT criteria; iii) qualities and/or

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<sup>8</sup> Information on this issue can be found on a recent survey on a balanced sample of the Italian population (Demos & Pi / Coop, 2004), showing that 40 percent of the population declares to have purchased at least once in a year FT products and 20 percent to have more frequent purchasing habits. The existence of a significant share of socially responsible consumers is also confirmed by parallel studies in the UK (Bird and Hughes, 1997), Belgium (De Pelsmacker, Driesen and Rayp, 2003) and Germany ([www.fairtrade.net/sites/aboutflo/aboutflo](http://www.fairtrade.net/sites/aboutflo/aboutflo)). On the crucial role of ethical consumers in Fair Trade see also Hayes (2004).



disservices in the FT product chain; iv) consumers' willingness to pay in excess for the SR features of FT products.

The survey contains several controls which allow us to rule out inconsistent answers. A first filter is for consumers declaring that they buy products for their informational transparency at question 7 and judge as absolutely insufficient information on products at question 9. The second filter is for consumers who provide inconsistent responses when answering to questions 6 and 20, in which they are asked whether they purchase their products in both *world shops* and supermarkets. The third filter is about the knowledge of the fair price criteria asked in both questions 15 and 27.1. The fourth filter is obtained by combining information from question 18 (knowledge that products are also sold in the large scale distribution) and question 20 where consumers are asked to judge the production range in the large scale distribution. The use of these filters leads to the exclusion from the sample of a total of 42 consumers giving inconsistent answers.

#### **4. Descriptive findings**

##### **4.1 Expenditure habits**

Descriptive findings, summarized in Table 1, show that about 32 percent of the consumers interviewed inside the *world shops* are students. The second largest group is that of retired workers (26 percent), followed by housewives (12 percent) and professionals (8 percent). 32 percent of them are members of non confessional volunteer associations, 20 percent of confessional volunteer associations, 12 percent of development NGOs.<sup>9</sup> Females are slightly less than two thirds of the sample. The average number of schooling years is 14 (corresponding to the first year of University in the Italian education system).

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<sup>9</sup> For (non) confessional associations we mean stable organisations of individuals with their own legal statute, in which there is explicit reference to the (non) religious motivations which determined their birth and animate their life. These associations may or may not be involved into domestic and international activities working in the field of social justice and sustainable development. For development NGOs we mean organisations which, differently from the above

The average net family income<sup>10</sup> in the sample is 2,371 euros, while equivalised income<sup>11</sup> is 1,304 euros. Average distance from the nearest FT outlet is around 17 minutes. Around 80 percent of the interviewed consumers declare to buy in *world shops* only.

A first important descriptive finding is the average expenditure for Fair Trade products, 75 cents per day, which amounts approximately to 20 euros per month (Table 2). As expected, distance matters and those at more than 40 minute distance from the FT retail shop spend slightly more than half of those within the 10-20 minute distance from it (45 against 85 cents daily). In Table 2 we also observe that average expenditure in fair trade products does not grow when income changes. The only exception seems to be that of members of confessional associations (and of development NGOs), whose expenditure turns from 60 to 90 cents (from 47 cents to 1 euro), when moving from the lowest to the highest income bracket.

The average expenditure share on family income for fair trade products in the sample is around 1 per cent (Table 3). The share drops from 1.3 to 0.6 respectively from consumers at no more than 10, to those at more than 40 minute distance. This figure seems very low but we must consider that *world shops* are not so widespread and that only a limited range of food and artisan products may be purchased (i.e. tea, coffee, sugar, pasta, etc.).<sup>12</sup>

These first descriptive findings seem to show that distance from the nearest outlet has effects on consumption, as it is expected to be for food products which must be purchased with some frequency in time. They also show that, at the moment, fair trade products are far from being luxury

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mentioned associations, have an international activity in the field of social justice and sustainable development as their specific goal and reason of existence.

<sup>10</sup> Average net family income is calculated as monthly after tax (wage) family income minus or plus all other (nonwage) monthly income flows (i.e. mortgages, housing rents, etc.)

<sup>11</sup> We compute equivalised income by using the OECD approximation in which any additional adult is weighted .5 and any children .3 [ $AE = 1 + 0.5 (N_{adults} - 1) + 0.3 N_{children}$ ]. We conventionally assume that the second component of the family is an adult and those from the third on are children.

<sup>12</sup> In 2004 the average monthly expenditure of the Italian consumer for the range of food products which can be bought in *world shops* was estimated to be around 32.8 euros. Hence, by imputing an expenditure share of 1/3 to artisan products on the total of FT expenditure (20 euros on average), we can roughly evaluate that FT consumers in our sample shifted, on average, around 45% of the relevant consumption share from non FT to FT products.

goods, as it is generally believed by the traditional press due to their nonnegative price differential with respect to equivalent non SR products. Based on our descriptive evidence, the purchasing habit of FT products seems to be still conceived as a symbolic action implemented with a lump sum consumption almost insensitive to income.

#### **4.2 Awareness of SR criteria**

A crucial competitive factor for socially responsible *vis à vis* traditional products is consumers' knowledge and awareness of the SR features of the products.

As already specified in the previous section we may identify at least eight socially responsible criteria in FT products (see section 2). The first criterion is that of fair price. Consumer awareness of this criterion is the highest (around 75 percent) (Table 4).

Following in descending order, 67 percent of interviewed consumers are informed about the commitment to improve producers working conditions (and to fight child labour through integration of household income) (67 percent). Slightly more than half of sample (around 52 percent) respondents know FT commitment to environmental sustainability. All other criteria are known by less than half of sample respondents (transparency by 41 percent, provision of local public goods by 39 percent, prefinancing by 36 percent, price stabilization by 30 percent and long run relationship by 27 percent). These numbers tend to be higher when we focus on volunteers of non confessional associations and lower for students (with the exception of transparency).

Given the importance of financial criteria (prefinancing and price stabilization) it is surprising that there is such reduced awareness of them among FT consumers.

#### **4.3 Evaluation of fair trade rules and policies**

Independence and heterogeneity of retail outlets seem to be a value for consumers, since only 35 percent of them would be happy if products were to be sold in franchising. This value drops to 27 percent for volunteers in non religious associations, while it goes up to 50 percent for those active in political parties. The share of consumers which would welcome a common ethical label in Europe is much higher than 50 percent and goes up to 88 percent for teachers. These results may be interpreted by arguing that SR consumers desire uniformity and easy recognition in label standards as these elements may contribute to solve the problem of informational asymmetry, but prefer variety when it comes to retailer characteristics. Descriptive findings on this specific point are obviously subject to a selection bias since all those interviewed are *world shop* customers.

#### **4.4 The relationship between dedicated fair trade outlets (“world shops”) and supermarkets**

The importance of the role of distance when selling food products introduces one of the dilemmas of the fair trade movement. *World shops* have very thin margins (usually reinvested in education projects) and their diffusion depends on the strength of seller’s preferences for solidarity more than on profit maximizing behaviour. Retailers’ “solidarity spirits” must be much stronger than those of FT consumers since starting up and operating a business requires much more effort and motivation than just purchasing FT products. This explains why FT retail outlets are not so widespread. This distributional bottleneck is a serious problem when selling food products which are generally purchased (at least some of them) with high frequency and within a limited distance from consumers residence. Fair trade importers have therefore started to use large scale distribution (together with *world shops*) to sell their products, even though many consumers and producers find it contradictory with their principles (or, at least, would require large scale distribution to adopt the same SR criteria of the FT value chain).

Our survey investigates consumers’ perception of the problem finding that 67 percent of them know that products are sold also in the large scale distribution, but only 17 percent buy them also there.

The share of those favourable to buy from the large scale distribution would become higher (around 50 percent), would the latter adopt the same criteria of the fair trade movement (Tables are omitted for reasons of space and available upon request).

#### **4.5 Evaluation of the quality of products and services of the FT chain**

Consumers identify the reduced range of FT products as the main problem when interviewed about the quality of products and services in the FT chain (31 percent of the overall sample) (Table 4). A second concern is about location of FT outlets (28 percent of the sample). As expected this figure goes up to 45 percent for consumers at more than 40 minute distance from the nearest FT shop and up to 40 percent for those purchasing FT products also in the large scale distribution. A smaller share of consumers (higher in case of professionals and students) complains about the absence of online sales (13 percent). 12 percent of consumers points out the limited opening time of FT shops (12 percent). This problem is more important for executives (27 percent). Complaints about lack of courtesy and scarce competence of the *world shop* personnel come only from, respectively, 5 and 9 percent of the sample.

### **5. Econometric findings**

All results presented so far in the descriptive analysis are obviously subject to composition effects (the close relationship between two variables may be affected by a third hidden factor strongly associated to one of them). To evaluate the statistical and economic significance of the net effect of each factor on a given dependent variable we perform econometric estimates described and commented in the sections which follow.

#### **5.1 The treatment regression model for the evaluation of direct and indirect determinants of FT consumption**

Since fair trade products are bundles which combine physical characteristics with environmental and social values arising from the adoption of the FT criteria (see section 2), we reasonably expect that awareness of such criteria is fundamental for the identification and enjoyment of these particular goods. Our hypothesis is therefore that awareness of criteria is a significant and fundamental consumption driver, while, at the same time, we reasonably expect that such awareness is, in turn, influenced by a series of individual characteristics.

The best candidate for addressing these linkages is a treatment effect model estimated with a full maximum likelihood.<sup>13</sup> The model considers the effect of an endogenously chosen binary treatment (in our case the knowledge of at least 5 FT criteria)<sup>14</sup> on another endogenous continuous variable (the demand of FT products), where the two endogenous variables are conditional on two sets of independent variables.

More formally, we write the system as

$$\log(E_i) = \alpha_0 + \alpha_1 MI + \alpha_2 \log(d) + \alpha_3 \log(Y_i) + \alpha_4 \log(Age_i) + \alpha_5 \log(Sc_i) + \alpha_6 \log(WS_i) + \alpha_7 \log(LS_i) + \alpha_8 Aw + \sum_{j=1}^{n-1} \gamma_j A_j + \sum_{k=1}^m \delta_k X_{ki} + \varepsilon_i \quad (1.1)$$

$$Aw_i = \beta_0 + \beta_1 MI + \beta_2 \log(Y_i) + \beta_3 \log(Age_i) + \beta_4 \log(Sc_i) + \beta_5 \log(WS_i) + \beta_6 \log(LS_i) + \sum_{j=1}^{n-1} \theta_j A_j + \sum_{k=1}^m \xi_k X_{ki} + v_i \quad (1.2)$$

Where, in (1.1),  $E_i$  is the daily expenditure in FT products of the  $i^{\text{th}}$  consumer,  $d_i$  is the consumer distance from the nearest FT *world shop*,  $Y$  is consumer family income,  $Age_i$  is consumer age,  $Sc_i$  is the number of schooling years,  $WS_i$  and  $LS_i$  are, respectively, the duration of purchasing habits in the FT *world shop* and in the large scale distribution. To these regressors we add three geographical

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<sup>13</sup> Treatment effect approaches are generally adopted when a determinant of a given dependent variable is endogenously determined (see Medda, Piga and Siegel, 2003 and Ayalew and Dreacou, 1998). Two important papers discussing pros and cons of treatment effect models applied to economic problems and the problem of extrapolating local average to population average treatment effects are those of Angrist (2003) and Oreopoulos (2006).

dummies measuring respectively consumer location in the North-East, North-West or South area<sup>15</sup> and a set of additional controls (the variables  $X_i$ ) for professional status, faith and membership.

In (1.1)  $A_w$  is a dummy which takes the value of one if consumers know at least five of the eight FT criteria and zero otherwise.  $A_w$  is also the binary dependent variable of the second equation (1.2) of the system, where regressors are all those of the first equation (with the obvious exception of the awareness ( $A_w$ ) and distance ( $d$ ) variables). In the two equation system ( $v$ ) and ( $\varepsilon$ ) are bivariate

normal random variables with zero mean and covariance matrix  $\begin{bmatrix} \sigma & \rho \\ \rho & 1 \end{bmatrix}$ . The likelihood function

for the joint estimation of (1.1) and (1.2) is provided by Maddala (1983) and Green (2000).

The treatment effect approach implies that the two equations must be estimated simultaneously since, when we estimate the determinants of the demand for FT products and of awareness of FT criteria, we reasonably expect (and assume) that the dependent variable of the second regression (awareness of FT criteria) has a strong and significant impact on the dependent variable of the first regression (demand for FT products). The advantage of the treatment effect model is that it allows to disentangle the direct effect of a regressor (e.g. membership to an association of non confessional volunteers) on the demand for FT products, from its indirect effect (via its impact on the treatment effect measured by awareness of FT criteria).<sup>16</sup>

Empirical results confirm the validity of our choice (Table 5). The null hypothesis of the independence of the two equations ( $\rho=0$ ) is rejected by the LR test confirming the need of estimating them jointly. Awareness of at least five of the eight FT criteria has the strongest impact

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<sup>14</sup> We arbitrarily define this threshold but we also make a sensitivity analysis around it looking at the impact of the knowledge of 4 or 6 criteria. Results are substantially unchanged and are available from the authors upon request.

<sup>15</sup> North East, North West and South correspond to NUTS 1 aggregation levels with the exception of South and Isles, which are separated in NUTS1, and commonly pooled in most reports of Italian and international statistical and economic institutions.

<sup>16</sup> In order to control for the robustness of this findings to endogeneity and reverse causality we also performed an instrumental variable estimate where knowledge of the FT criteria is instrumented by the length of purchasing habits in the world shop, since the latter variable is definitely determining

on the demand for FT products among regressors of the first equation raising three times the amount of expenditure, net of the impact of additional controls. By inspecting the effects of other regressors we find that membership of non confessional and confessional volunteers association affects demand for FT products not directly, but only (and quite significantly) through awareness of FT criteria. Coefficient magnitudes indicate that the first variable (membership of non confessional associations) raises by 65 percent the likelihood of being aware of at least 5 criteria which, in turn, raises FT expenditure by a factor of three in the first equation. Hence, its indirect impact on the last variable is expected to be of the order of 195 percent. A similar result is found for the impact of duration of purchasing habits in a *world shop*. This variable affects the demand for FT products not directly, but via awareness of FT criteria. These results confirm that dedicated FT outlets effectively perform their role of increasing sales through enhanced awareness of SR features of FT products. Consider though that purchasing habits in the large scale distribution significantly affect awareness as well, but with a coefficient which is lower than that of habits in *world shops*.

We also find that income has a direct positive effect on the demand for FT products, while it affects negatively the treatment variable (awareness of FT criteria). Hence, FT products are more sensitive to income than what appears to be when we do not consider that higher income consumers are less aware of FT criteria. Similar opposite effects are found for age, which has a positive direct effect on expenditure, but a negative indirect effect through reduced awareness of FT criteria. With regard to the age effect, it is not possible to detect, in our cross-sectional estimate, whether the age-awareness relationship hides a cohort effect or not. We strongly suspect that this is the case, if we consider that knowledge of fair trade is more widespread among the young and that fair trade itself is a quite recent phenomenon. This may lead us to believe that fair trade purchases should rise in the future, assuming that the current generation will buy more once becoming older and wealthier

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the former, while not being at risk of being caused by current FT expenditure. Results are omitted for reasons of space and available from the authors upon request.



(consider that we measure net income, but we do not have any proxy of wealth which could be correlated with age, thereby explaining part of the significant age effect in our estimates).

An important policy suggestion arising from the treatment effect model is that the growth in awareness of FT criteria by older and wealthier consumers may have a strong potential impact on FT product demand.

## **5.2 The determinants of the willingness to pay for SR features of FT products**

In our questionnaire consumers are asked to indicate their willingness to pay (WTP) in excess for FT products with respect to equivalent products without SR characteristics.<sup>17</sup>

The demand is repeated by imagining different distances between the two competing products and considering the alternative of FT products sold by the large scale distribution or by in *world shops* (questions 29-34 in the questionnaire reported in the Appendix C).

As it is well known the literature on contingent valuation highlights some potential biases arising from the investigation of the willingness to pay for a given good based on a direct demand on it from survey data (Mitchel-Carson, 1989 and Diamond-Hausman, 1994). A first bias is represented by strategic behaviour when the responder knows that his response may affect the decision on the quantity of a public good and service provided. A second bias arises when the hypothetical scenario prospected by the interviewed is too unrealistic. The bias may be reduced if the respondent is familiar with such scenario. A third bias is the so called “embedding effect”. With this respect, many empirical results (see, among others, Kahneman-Knetsch, 1992; Carson et al. 1995; Randall-Hoehn, 1996) show that quantitative responses tend to be strikingly similar in spite of the different situations presented within the same scenario.

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<sup>17</sup> In a technical Appendix (Appendix A) available upon request we show that, given a reasonable specification of consumer preferences, this question exactly measures the relative weight of the social preference argument in consumer’s utility function.

The rationale is that individuals have a clear idea of their general WTP for a given good, but not on its exact quantitative amount and on its variation according to changes in the side conditions prospected in the hypothetical demands. The fourth is an upward bias on WTP findings generated by the desire of the respondent to please the interviewer.

Given the structure of our survey, we believe that answers on the willingness to pay for the SR features of FT products are likely to be affected mainly by the last two biases. Such biases are more likely to distort the quantitative data on the willingness to pay and the total number of positive responses while they should not affect the signs of the determinants of the willingness to pay in econometric estimates. For this reason we focus on econometric findings and not on descriptive results on the average WTP declared by sample respondents.<sup>18</sup>

We therefore estimate the determinants of consumer willingness to pay in excess for the socially responsible features of the product following a treatment effect approach similar to that shown in section 5.1

$$\text{Log}(W_{ijl}) = \alpha_0 + \alpha_1 \log(Vd_{ij}) + \alpha_2 DLS + \alpha_3 \log(Y_i) + \alpha_4 \log(Age_i) + \alpha_5 \log(Sc_i) + \alpha_6 \log(WS_i) + \alpha_7 \log(LS_i) + \alpha_8 Aw_i + \sum_{r=1}^{n-1} \gamma_r A_r + \sum_{k=1}^m \delta_k X_{ki} + \varepsilon_{ijl} \quad (2.1)$$

$$Aw_i = \beta_0 + \beta_1 MI + \beta_2 \log(Vd_{ij}) + \beta_3 \log(Y_i) + \beta_4 \log(Age_i) + \beta_5 \log(Sc_i) + \beta_6 \log(WS_i) + \beta_7 \log(LS_i) + \sum_{j=1}^{n-1} \theta_j A_j + \sum_{k=1}^m \xi_k X_{ki} + v_i \quad (2.2)$$

where (in 2.1)  $W_{ijl}$  is a continuous variable measuring the declared willingness to pay in excess for the SR features of the FT product of consumer  $i$  at the  $j$ th (0, 15, 30 minute) virtual distance from the  $l$ th type of (FT dedicated outlet or supermarket) retailer.  $Vd_{ij}$  is the  $j$ th virtual distance at which the consumer  $i$  is expected to buy the product,  $DLS$  is a dummy taking the value of one if the product is “virtually” purchased in the large scale distribution and zero otherwise. Other regressors are defined as in section 5.1.

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<sup>18</sup> A detailed discussion of this last finding is developed in an Appendix (Appendix A) omitted for reasons of space and available upon request.

Consider that the specific structure of our model is such that any individual  $i$  ( $i=1,\dots,n$ ) gives  $j \times l$  different answers with ( $j=1,\dots,3$ ) and ( $l=1,2$ ) for a total number of  $n \times 6$  observations. An estimate of the model with a standard least square procedure would not keep into account that observations are correlated within individuals and would thereby lead to an underestimation of the variance (i.e. the residual variance of the 6 responses given by the same individual is expected to be lower because observations are correlated). Therefore we correct with the clustering approach our standard errors incorporating the assumption that observations are dependent within individuals.

Another difference with the previous model is that virtual distance and virtual purchasing place (*world shops* or supermarkets) do not obviously enter in the second equation.

As in the case of the demand for FT products (Table 5), the independence between the two equations is not rejected, even though at a lower level of significance (Table 6). Furthermore, we find that purchasing the product from the large scale distribution reduces by 47 percent the declared willingness to pay in excess, while doubling the virtual distance reduces it by 24 percent. Awareness of FT criteria is, again, a crucial variable. Knowledge of at least 5 of the 8 fair trade criteria<sup>19</sup> raises by 77 percent the willingness to pay in excess for FT products. No other variables are significant in the first equation.

In the second equation awareness of fair trade criteria is affected by several regressors. The probability of knowing at least 5 of the 8 FT criteria is 47 percent lower when age doubles, 67 percent (25 percent) higher for volunteers in non confessional (confessional) associations and 18 percent higher when duration of consumption habits in *world shops* doubles. Duration of consumption in supermarkets has no impact on the willingness to pay.<sup>20</sup>

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<sup>19</sup> We perform a robustness check to see how our findings are sensitive to a change in the number of criteria used to define our dichotomous variable. Results are substantially unchanged in sign and significance (and slightly in magnitude) if we consider four or six criteria. These findings are omitted for reasons of space and available from the authors upon request.

<sup>20</sup> We perform individual equation estimates on the determinants of the willingness to pay in excess where each FT criteria enters individually in the equation. With this approach we find that the two criteria affecting more the dependent variable are the local public good investment and long run

## 6. Conclusions

It is reasonable to expect that the compression of distances generated by global integration of real and financial markets should lead to an enlargement of the reference group considered by individuals' having "social preferences".

In this paper we provide evidence for this guess. If previous research evidenced that workers and consumers decisions were not taken in isolation, but crucially considering status and choices of peers and neighbours, we show that, in the era of global integration, consumers in industrialised countries may be affected in their choices by the sense of solidarity and interdependence with people living in distant countries.

More specifically, we illustrate that a group of "concerned consumers" is ready to pay more for the SR features of a special kind of products (FT products), aimed at supporting development and inclusion in global markets of marginalised producers in LDCs.

Results from our estimates confirm that FT products are perceived as bundles of physical and social characteristics successfully testing the hypothesis that awareness of socially responsible criteria is a fundamental driver of consumer demand for them. Given these links, we show that the proper way to estimate their demand is through a treatment effect model in which consumption is affected directly by various controls (including income and geographical distance from the nearest outlet) and, indirectly, by all those factors significantly affecting awareness of socially responsible criteria. Our findings also show that the behaviour of *world shops* (investing much more in education of consumer awareness than in traditional marketing policies) is rational, given the specific features of their product.

Finally, obtained results suggest that the future development of the FT chain depends on two crucial issues: i) the capacity of the FT movement of extending its outreach when investing in promotion

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relationship criteria. Results are omitted for reasons of space and available from the authors upon request.

and knowledge of FT products; ii) the solution of the problem of distributional bottlenecks of FT products aimed to reduce the negative effect of distance on consumption of FT goods.

**Table 1 Main characteristics of the sample**

Variable	Category	Value
Sociodemographic characteristics	Age	34
	Male	35.59*
	Schooling years	14
	Believer	60.35*
	Net family income	2371
	Equivalised income**	1304
Geographical distance	Distance from the nearest fair trade <i>world shop</i> (in minutes)	16.67
Purchasing habits	<i>World shop</i> only purchasers (percent)	80.14*
	Large scale distribution (percent)	19.86*
Professional status	Executive	2.38*
	Entrepreneur	1.40*
	Unemployed	4.21*
	Professional	7.88*
	Housewife	12.31*
	Student	31.75*
	Teacher	2.81*
	Manual worker	3.13*
	Clerk	5.94*
	Retired worker	25.92*
Membership	Non confessional volunteer associations ***	31.95*
	Confessional volunteer associations***	20.40*
	Political party	4.89*
	Development NGOs***	11.97*

\*percent

\*\* See definition at footnote 10.

\*\*\* See definition at footnote 9.

**Table 2. Daily expenditure in fair trade products (in euros)**

	1ST (LOWEST) THIRD OF THE INCOME DISTRIBUTION	3RD (HIGHEST) THIRD OF THE INCOME DISTRIBUTION	ALL SAMPLE	1ST (LOWEST) THIRD OF THE INCOME DISTRIBUTION	3RD (HIGHEST) THIRD OF THE INCOME DISTRIBUTION	ALL SAMPLE
All sample	.72	.75	.750	0.008	0.010	0.0104
<b>Professional status</b>						
Housewife	0.619	0.712	0.831	0.008	0.008	0.009
Professional	0.692	0.789	0.810	0.007	0.008	0.009
Student	0.462	0.413	0.465	0.010	0.003	0.008
Retired worker	1.334	0.896	0.925	0.025	0.007	0.015
<b>Membership</b>						
Non confessional associations*	0.931	0.932	0.971	0.020	0.008	0.018
Confessional associations*	0.607	0.901	0.706	0.012	0.010	0.011
Political party	0.811	0.661	0.605	0.022	0.008	0.010
Development NGOs*	0.469	1.008	0.798	0.010	0.011	0.013
<b>Distance from the nearest fair trade “world shop” (dedicated FT outlets)</b>						
<10 minutes	0.652	0.800	0.716	0.015	0.007	0.013
10-20 minutes	0.815	0.782	0.853	0.016	0.007	0.014
20-40 minutes	0.662	0.641	0.659	0.016	0.008	0.014
>40 minutes	0.399	0.645	0.447	0.009	0.006	0.006
<b>Sex</b>						
Male	0.790	0.669	0.709	0.017	0.006	0.012
Female	0.621	0.774	0.737	0.014	0.007	0.013
<b>Religious beliefs</b>						
Believers	0.636	0.791	0.740	0.014	0.007	0.012
<b>Consumers purchasing FT products ...</b>						
...in <i>World shops</i> only	0.708	0.751	0.760	0.016	0.007	0.014
...also in supermarkets	0.509	0.696	0.559	0.012	0.006	0.009

\* See definition at footnote 9.

**Table 3 Awareness of fair trade criteria (percent of sample respondents who are aware)**

	FAIR PRICE	PREFINANCING	PRICE STABILISATION	PROVISION OF LOCAL PUBLIC GOODS	LABOUR	ENVIRONMENT	TRANSPARENCY	LONG RUN RELATIONSHIP
All sample	74.9	35.9	29.7	39.1	66.9	51.6	40.9	27.0
<b>Professional status</b>								
Housewife	83.3	44.7	36.8	51.8	74.6	56.1	47.4	36.8
Professional	76.7	39.7	39.7	50.7	79.5	61.6	46.6	31.5
Student	73.1	33.3	25.5	35.0	61.2	47.6	46.3	23.5
Retired worker	69.1	45.5	23.6	34.5	70.9	56.4	30.9	20.0
<b>Affiliation</b>								
Non confessional associations*	83.4	56.7	41.7	52.8	79.5	63.5	57.3	41.4
Confessional associations*	82.7	41.3	35.2	43.9	71.9	57.7	46.9	32.1
Political parties	68.1	40.4	31.9	34.0	61.7	51.1	36.1	23.4
Development NGOs*	73.9	43.5	42.6	50.4	71.3	61.7	46.9	33.9
<b>Sex</b>								
Male	76.0	36.8	32.7	38.6	65.8	52.0	41.5	30.7
Female	74.3	35.4	28.3	39.4	67.5	51.4	40.5	24.9
<b>Religious beliefs</b>								
Believers	76.0	36.9	28.8	40.3	67.2	49.5	39.1	26.0
<b>Consumers purchasing FT products ..</b>								
...in World shops only	75.9	37.6	29.5	39.8	66.9	52.6	42.2	27.4
...also in supermarkets	70.7	28.7	32.3	35.9	67.1	46.7	34.7	24.5

*Fair price*: premium on the market price paid to primary product producers by local intermediaries or food transnationals. *Prefinancing*: anticipated financing aimed to reduce the impact of local moneylenders on small uncollateralized producers. *Price stabilization*: price stabilization mechanisms which insulate risk averse primary product producers from the high volatility of commodity prices; *Labour*: intervention to improve working conditions and to remove factors leading to child labour through monetary integration of poor household income; *Pgoods*: preferential inclusion in the fair trade chain of projects reinvesting part of the surplus arising from the fair price in the provision of local public goods (health, education, job training). *Environment*: attention to the environmental sustainability of production processes; *Longrun*: creation of long run relationships between importers and producers and provision through them of export services. For further details and discussion of these criteria see section 3.\* See definition at footnote 9.



**Table 4. Evaluation of the main limits in the quality of product and services of the FT chain**

	NOPROD	NOONLINE	BADPROFES	BADPLACE	BADTIME	BADPERS
All sample	31.4	12.5	5.3	28.0	12.2	8.8
<b>Professional Status</b>						
Housewife	34.2	7.9	5.3	27.2	14.0	10.5
Professional	27.4	19.2	5.5	27.4	12.3	4.1
Student	29.6	16.6	6.5	31.0	11.2	7.8
Retired worker	21.8	07.2	3.6	21.8	12.7	1.8
<b>Membership</b>						
Non confessional associations*	36.8	14.3	7.8	26.4	13.0	9.1
Confessional associations*	33.7	11.7	6.1	23.0	13.0	7.1
Political parties*	31.9	06.4	8.5	34.0	10.6	10.6
Development NGOs	34.8	14.8	7.0	25.2	13.0	09.6
<b>Consumers purchasing FT products ..</b>						
...in <i>World shops</i> only	32.3	12.8	5.8	25.2	11.8	8.4
...also in supermarkets	28.1	11.4	3.0	40.7	13.2	11.4
<b>Religious beliefs</b>						
Believer	34.0	13.4	6.0	27.4	12.9	9.3
<b>Sex</b>						
Male	29.2	13.7	6.4	27.5	11.4	10.5
Female	32.6	11.8	4.7	28.3	12.6	7.9
<b>Distance from the nearest FT outlet</b>						
<10 minutes	35.9	11.1	6.6	15.9	12.3	9.9
10-20 minutes	30.3	15.2	5.0	25.9	14.6	8.2
20-40 minutes	31.3	12.5	4.2	44.8	11.5	7.8
>40 minutes	21.7	5.8	4.3	44.9	05.8	13.0

Legend: NOPROD: limits in the FT product range; NOONLINE: absence of on-line sales; BADPROFES: scarce professional experience of the *world shop* personnel; BADPLACE: unsatisfactory location of the FT outlet; BADTIME: reduced opening time of FT *world shops*; BADPERS: scarce courtesy of the *world shop* personnel.

\* See definition at footnote 9.

**Table 5 The determinants of fair trade expenditures in a treatment regression model**

	FIRST EQUATION: DEP. VARIABLE = LOG OF DAILY EXPENDITURE IN FT PRODUCTS		SECOND EQUATION: DEP. VARIABLE = AWARENESS OF AT LEAST FIVE FT SR CRITERIA (KNOWMOSTCRITERIA)	
	Coeff.	T-stat	Coeff.	T-stat
LOG(D)	-0.167	-3.24		
LOG(Y)	0.212	2.89	0.0001	-3.3
ML	-0.114	-1.1	0.134	1.26
LOG(AGE)	0.681	3.3	-0.361	-1.71
LOG(SC)	-0.297	-1.08	0.384	1.34
NORTH-EAST	0.086	0.37	-0.027	-0.11
NORTH-WEST	0.071	0.4	0.288	1.57
SOUTH	0.102	0.76	0.169	1.3
FAITH	-0.079	-0.73	-0.166	-1.51
STUDENT	-0.300	-1.77	-0.157	-0.92
THEACHER	0.225	0.75	-0.344	-1.06
MANUAL WORKER	0.197	0.63	-0.310	-0.97
CLERK	-0.103	-0.83	-0.202	-1.62
NCVOL	0.035	0.3	0.654	5.94
CVOL	-0.105	-0.82	0.293	2.27
NGO	-0.055	-0.36	0.333	2.25
LOG(WS)	-0.024	-0.29	0.358	4.52
WSONLY	0.368	2.76	-0.080	-0.6
LOG(LS)	0.147	1.4	0.223	2.19
NOCOMPLAINTS	0.130	1.34		
KNOWMOSTCRITERIA	2.190	11.26		
CONSTANT	-4.583	-3.82	-0.661	-0.57
LR- TEST (H <sub>0</sub> : INDEPENDENCE OF THE TWO EQUATIONS)		21.01 (0.00)		
N. OF OBS.		700		
LOG-L ON OVERALL SIGNIFICANCE		1412.48 (0.00)		

We estimate a treatment regression model whose specification is presented in section 5.1

**Variable legend:** DST: declared distance from the nearest FT *world shop* in minutes; Y: average net family income calculated as monthly after tax (wage) family income minus or plus all other (nonwage) income flows (i.e. mortgages, housing rents, etc. ; SC: average schooling years; NORTH-EAST: dummy for consumer location in the North-East of the country (Trentino-Alto Adige, Veneto, Friuli-Venezia Giulia, Emilia Romagna); NORTH-WEST: dummy for consumer location in the North-West of the country (Piemonte, Valle D'Aosta, Lombardia, Liguria); SOUTH: dummy for consumer location in the South of the country (Calabria, Campania, Puglia, Sardegna, Sicilia); NCVOL: volunteer members of non confessional associations, CVOL: volunteer members of confessional associations; NGO: membership of a development NGO (for definition see footnote 14); WS: duration of purchasing habits in “*world shops*” (dedicated FT outlets) (number of years); WSONLY: dummy for those purchasing from *world shops* only; LS: duration of purchasing habits in the large scale distribution (number of years), KNOWMOSTCRITERIA: knowledge of at least 5 out of 8 FT criteria; NOCOMPLAINTS: absence of complaints on fair trade chain; MOSTCOMPLAINTS: agreement on at least 5 out of 8 reasons for complaining about the FT product chain (see Table 5 legend).

**Table 6 The determinants of the willingness to pay in excess for the SR features of FT products**

	FIRST EQUATION: DEP. VARIABLE = WILLINGNESS TO PAY IN EXCESS FOR THE SR FEATURES OF FT PRODUCTS		SECOND EQUATION: DEP. VARIABLE = AWARENESS OF AT LEAST FIVE FT SR CRITERIA (KNOWMOSTCRITERIA)	
	Coeff.	T-stat	Coeff.	T-stat
DLS	-0.478	-8.73		
LOG(VD)	-0.246	-15.94		
LOG(Y)	-0.119	-1.04	-1.49	-0.001
ML	0.079	1.66	0.029	0.27
LOG(AGE)	0.044	0.18	-0.470	-2.04
LOG(SC)	-0.193	-1.3	0.334	1.15
NORTH-EAST	-0.213	-0.84	0.014	0.06
NORTH-WEST	-0.023	-0.13	0.224	1.23
SOUTH	0.203	1.3	0.187	1.27
FAITH	0.122	1.02	-0.050	-0.43
STUDENT	-0.021	-0.12	-0.174	-0.99
THEACHER	0.320	0.92	-0.363	-1.03
MANUAL WORKER	0.109	0.33	-0.281	-0.76
CLERK	0.027	0.2	-0.071	-0.55
NCVOL	-0.109	-0.76	0.676	5.97
CVOL	-0.044	-0.31	0.250	1.87
NGO	-0.108	-0.62	0.391	2.42
LOG(WS)	0.132	1.38	0.186	1.72
WSONLY	-0.164	-1.16	-0.044	-0.31
LOG(LS)	-0.087	-0.73	-0.050	-0.43
KNOWMOSTCRITERIA	0.774	2.07		
CONSTANT	3.14	2.35	1.03	1.91
LR- TEST		3.19		
(H <sub>0</sub> : INDEPENDENCE OF THE TWO EQUATIONS)		(0.07)		
N. OF OBS.		4053		
LOG-L ON OVERALL SIGNIFICANCE		-10337.6 (0.00)		

We estimate a treatment regression model whose specification is presented in section 5.2

*Variable legend.* The dependent variable of the first equation  $W_{ijl}$  is the declared willingness to pay in excess for the SR features of the FT product of consumer  $i$  at the  $j_{th}$  distance from the FT shop (0, 15, 30 minute distance) from the  $l_{th}$  type of retailer (FT *world shop* or supermarket). Information on these variables is drawn from questions 29-34 in the attached survey).  $Vd_{ij}$  is the “virtual” distance at which the consumer  $i$  buys the product,  $DLS$  is a dummy taking value of one (zero) if the “virtual” purchase is done in the large scale distribution (*world shops*). Other regressors are defined as in section 5.1.

## References

- Adriani F. Becchetti L., 2005, Fair trade: a “third generation welfare” mechanism to make globalisation sustainable, CEIS Working Paper, n. 171
- Agell, J., Lundborg P., “Survey Evidence on Wage Rigidity and Unemployment: Sweden in the 1990s”, forthcoming *Scandinavian Journal of Economics* (2002).
- Akerlof G.A. (1982), “Labor contract as partial gift exchange”, *The Quarterly Journal of Economics*, XCVII 4
- Anderson, S., 1987, Spatial competition and price leadership, *International Journal of Industrial Organization*, 5( 4), pp. 369-98
- Angrist, J. D., 2003, Treatment Effect Heterogeneity in Theory and Practice, National Bureau of Economic Research, Inc, NBER Working Papers: 9708
- Ayalew D., Drecon S., 1998, Where Have All the Soldiers Gone: Demobilization and Reintegration in Ethiopia, *World Development*, September 1998, v. 26, iss. 9, pp. 1661-75
- Bahadur C., Mendoza R., 2002, Toward Free and Fair Trade: A Global Public Good Perspective, *Challenge*, 45, pp. 21-62
- Basu, K. (1999) Child Labour, cause, consequence and cure, with remarks on interantional labour standards, *Journal of Economic literature*, vol. 37, pp. 1083-1119.
- Basu, K. and P.H. Van, (1998), “The Economics of Child Labor” *American Economic Review* 88, 412-427
- Becchetti L., Solferino N, 2003, On ethical product differentiation, CEIS working paper n 188.
- Becchetti L., Solferino N, 2004, The dynamics of ethical product differentiation and the habit formation of socially responsible consumers, *Working Paper AICCON-Università di Bologna*
- Bewley, Truman F., 1999, *Why Wages Don't Fall During A Recession*, (Cambridge, Mass.: Harvard University Press,.
- Bhagwati J., 1996, Fair Trade and Harmonization: Prerequisites for Free Trade? Volume 1: Economic Analysis: Introduction, Cambridge and London: MIT Press.
- Bird, K. & Hughes, D.: 1997, ‘Ethical consumerism: the case of “fairly-traded” coffee, *Business Ethics: a European Review*, 6, 3, pp.159-167
- Cairncross, F, 1997, The death of distance, Londra, Orion.
- Camargo, J., 1984. Minimum Wage in Brazil Theory, Policy and Empirical Evidence. Pontificia Universidade Catolica Discussion Paper 67.
- Camerer, C., Behavioral Game Theory: Experiments on Strategic Interaction, Princeton University Press, 2003.

Campbell, Carl M., and Kunal S. Kamalani, "The Reasons for Wage Rigidity: Evidence from a Survey of Firms," *The Quarterly Journal of Economics*, 3 (1997), 759 -89

Card, D., Krueger, A. B., 2000, Minimum wages and employment. A case study of the fast food industry in West virginia and in Pennsylvania *American Economic Review*, 90(5), pp. 1397-1420

Carneiro, F., 2002. Uma Resenha Empirica sobre os Efeitos do Salario Minimo no Mercado de Trabalho Brasileiro. In: The Jobs Report, The World Bank, Washington, forthcoming.

Carson, Richard T.; Robert Cameron Mitchell. 1995. "Sequencing and Nesting in Contingent Valuation Surveys." *Journal of Environmental Economics and Management*, Volume: 28, Issue: 2, Pages: 155-173.

Conley and Udry (2003) "Learning about a New Technology: Pineapple in Ghana" Paper n. 817 Yale – Economic Growth Center

Demos & Pi / Coop, 2004, Osservatorio sul Capitale sociale Virtù e valori degli italiani, Indagine 2004

D'aspremont, C., J.J.Gabsewicz , J.F., Thisse, 1979, On Hotelling's stability in competition, *Econometrica*, 47, 114-1150.

DeBenedictis L., R. Helg, 2002, Globalizzazione, *Rivista di Politica Economica*, marzo-aprile,

De Pelsmacker, P. Driesen L. Rayp G., 2003, Are fair trade labels good business ? ethics and coffee buying intentions. Workign paper University of Gent.

Diamond, Peter A. and Jerry A. Hausman (1994). "Contingent Valuation: Is Some Number Better than No Number." *Journal of Economic Perspectives*, 8(4):45-64.

El-Hamidi, F. Terrell, K., 2001, The Impact of Minimum Wages on Wage Inequality and Employment in the Formal and Informal Sector in Costa Rica Davidson Institute Working paper n.479

European Fair Trade Association, 2001, EFTA Yearbook, [www.eftafairtrade.org](http://www.eftafairtrade.org).

Fehr E., Schmidt K. (1999), " A theory of fairness, competition and cooperation", *Quarterly Journal of Economics* 114: 817-868

Fehr, E., K. M. Schmidt, 2002, "The Economics of Fairness and Reciprocity", in: M. Dewatripont et.al. (eds.) *Advances in Economic Theory*, Eight World Congress of the Econometric Society, Cambridge: Cambridge University Press, Vol. 1, 208-257.

Fehr E., Falk A. Psychological Foundations of Incentives, in: *European Economic Review* 46 (2002), 687-724

Gneezy U., Rustichini A. (2000), "Pay enough or don't pay at all ", *Quarterly Journal of Economics* 115: 791-810

Gonzaga, G., Machado, D., 2002. Rendimento e Precos. In Abreu, M. (Ed.) *Estatisticas do Seculo XX*, IBGE, Rio de Janeiro.

Giddens, A., 2000, *Runaway world: how globalisation is reshaping our lives*, London, Routledge.

Greene, W.H., 2000, *Econometric Analysis*, 4<sup>th</sup> ed. Upper Saddle River, NJ, Prentice-Hall

Hayes, M., 2004, Strategic management implication of the ethical consumer  
<http://www.fairtraderesearch.org>

Hotelling, H., 1929, Stability in competition, *Economic Journal*, 39,41-57.

Kahneman, D.; Knetsch, J. (1992) Valuing Public Goods: The Purchase of Moral Satisfaction, *Journal of Environmental Economics and Management* 22, 57-70.

Kahneman, D. and Tversky A., 2000, *Choices, Values, and Frames*, 25 Cambridge University Press.

Leclair, M. S., 2002, Fighting the tide: Alternative trade organizations in the era of global free trade, *World Development* 30 (7): 1099–122

Lemos S., 2004, *The Effects of the Minimum Wage in the Formal and Informal Sectors in Brazil*, University of Leicester and IZA Bonn Discussion Paper No. 1089

Li J., 2006, The power of convention: a theory of social preferences," *Journal of Economic Behaviour and Organisation*, forth.

Maddala, G.S., 1983, *Limited-dependent and qualitative variables in econometrics*. Cambridge: Cambridge University Press.

Manning, A., 2003 "The Real Thin Theory: Monopsony in Modern Labour Markets", *Labour Economics*, 2003, 10, 105-134

Maseland R & Vaal A De, 2002, How fair is fair trade?, *De Economist*. 150(3), pp. 251-272

Medda, G., Piga, C., Siegel, Do., 2003, On the Relationship between R&D and Productivity: a Treatment Effect Analysis, *Fondazione Eni Enrico Mattei, Working Papers:n.34 and Rensselaer Working Papers in Economics*

Mitchell, Robert C.; Richard T. Carson. 1989. "Using Surveys to Value Public Goods: The Contingent Valuation Method." *Resources for the Future*, Washington, D.C., Number of Pages: 463.

Moore, G., 2004, The Fair Trade Movement: parameters, issues and future research, *Journal of Business Ethics*, 53, 73-86

Oreopoulos, P., 2006, Average Treatment Effects of Education when Compulsory School Laws Really Matter, *American Economic Review*, v. 96, iss. 1, pp. 152-75

Randall, A. and Hoehn, JP, 1996, Embedding in market demand systems, *Journal of Environmental Economics and Management*, 30: 369-380.

Robertson, R., 1992, *Globalisation*, Londra, Sage.

Sobel, J., 2002, Can We Trust Social Capital?, Journal of Economic Literature, Vol. XL, 139-154

Stiglitz J., 2002, Globalization and its discontents ,.Publisher Information: New York and London: Norton Publication.

Suranovic S., 2002, International Labour and Environmental Standards Agreements: Is This Fair Trade?, The World Economy, 25(2 ), pp. 231-245

Waters, M., 2001, Globalisation, New York, Rutgers.

Whalley, J., 2005, Globalization and Values, CESifo Working paper series, CESifo

Women and Children: The Precarious Lives behind the Grains of Coffee, A Summary  
<http://www.coverco.org/eng/media/WomenandChildren.pdf>

Zamagni, S., 2002, Complessità relazionale e comportamento economico, materiali per un nuovo paradigma della relazionalità, Il Mulino, Bologna.

**QUESTIONNAIRE**

1. How long have you been buying FT products in *world shops*?

- One year
- Three years
- Five years
- More than 5 years

2. What you generally buy in *world shops*? (max. three answers in descending order of priority: 1 the most important,...,3 the least important)

- Food
- Textile\clothing
- Musical instruments |artisan products
- Other \_\_\_\_\_

3. What is the frequency of your FT purchases?

- More than once in a month
- At least once in a month
- Every two-three months
- One-two times a year
- Less than once a year

4. How much do you spend on average for any purchase?

- < 5 €
- 5 – 10 €
- 10 – 25 €
- > 25 €

5. How much do you spend for FT products?

- \_\_\_\_\_ € a week
- \_\_\_\_\_ € a month
- \_\_\_\_\_ € every six months
- \_\_\_\_\_ € a year

6. Do you buy FT products always in the same FT shop ?

- Yes
- Yes because I do not know other *world shops*
- No, also in other *world shops*
- No, also in the large scale distribution

7. Reasons for buying FT products (max. three answers in descending order of priority: 1 the most important,...,3 the least important)

- Ethics
- Higher transparency in the product chain
- More confidence in product quality
- Price/quality convenience
- Ethnic features of the product

8. Distance from the nearest *world shop*

- < 10 minutes
- 10 – 20 minutes
- 20 – 40 minutes
- > 40 minutes

Evaluation of FT products

9. How do you judge information on products?

- Exhaustive
- Incomplete
- Difficult to find
- Never seen

10. How do you judge the quality of FT food products?

- Scarce
- Sufficient
- Good
- Very good

11. How do you judge the quality of FT non food products?

- Scarce
- Sufficient
- Good
- Very good

12. For which kind of products you would like to have an extended range in *world shops* ? (max. three answers in descending order of priority)

- Food
- Clothing
- Giftware
- Other \_\_\_\_\_

13. Which limits and/or disservices do you find in *world shops* ? (max. three answers in descending order of priority)

- Lack of personnel courtesy
- Reduced opening time
- Limited product range
- Bad location
- Scarce professional assistance
- No on line purchases

Knowledge of FT

14. How did you know FT?

- Friends
- Promotional campaigns
- Fairs/exhibitions/conferences
- Media Advertising
- World Shops
- Other \_\_\_\_\_

15. Do you know the meaning of “fair price” ?

- Yes
- Not perfectly
- No

16. What do you like more when entering a *world shop* ? (max. three answers in descending order of priority)

- Ethnic environment
- Courtesy/kindness of the personnel
- Originality of products
- Opportunity to share values and of social aggregation
- Other \_\_\_\_\_

17. How do you judge the idea of a common European label for FT products ?

- Very useful to increase FT product sales
- Useful but not fundamental to sell this kind of products
- Not important because *world shops* give enough guarantee
- I don't know

Fair trade and large scale distribution



18. Do you know that FT products are sold also in the large scale distribution?
- Yes
  - No
19. If yes, why are you purchasing them in a *world shop*? (max. three answers in descending order of priority)
- Comfort/financial reasons
  - Wider choice of FT products
  - More information
  - Courtesy of the *world shop* personnel
  - Social and relational networking
20. Do you buy FT products also in the large scale distribution?
- Yes, often
  - Yes, sometimes
  - Seldom
  - Never
21. If yes what? (max. three answers in descending order of priority)
- Food products
  - Textile/clothing
  - Artisan products
  - Other \_\_\_\_\_
22. Since when?
- Less than a year
  - 1-2 years
  - 3-4 years
  - 5-10 years
23. How do you judge the choice of FT products in the large scale distribution?
- Scarce
  - Sufficient
  - Wide
  - Don't know
24. Which products would you like to find in the large scale distribution? (max. three answers in descending order of priority)
- Food
  - Clothing
  - Giftware
  - Other \_\_\_\_\_
25. Are you favourable to the sale of FT products by the large scale distribution?
- Yes, because it contributes to the diffusion of FT
  - Yes, but only if FT principles (fairness, transparency etc..) are respected
  - No, because it cannot be consistent with FT principles
  - Don't know
26. Would you like all *world shops* having common features (as in franchising) to make it easier for consumers to recognise them?
- I'm favourable because it would be advantageous for all the FT product chain
  - It could be done but I do not believe there would be great advantage from it
  - I'm against because \_\_\_\_\_
27. Which of the following FT criteria do you know?
- Fair price
  - Prefinancing schemes for producers
  - Price stabilisation
  - Investment in local public goods (health, education)
  - Care for working conditions
  - Care for environmental sustainability
  - Informational transparency
  - Long run relationship with producers
28. Which of the following FT criteria are more important to you? (max. three answers in descending order of priority)
- Fair price
  - Anticipated financing
  - Price stabilisation
  - Investment in local public goods (health, education)
- Attention to working conditions
  - Attention to environmental sustainability
  - Informational transparency
  - Long run relationship with producers
29. Assuming to shop once a week for food products and to have a world shop at the same distance of a non FT outlet, how much are you willing to spend in excess per month for a FT product with respect to an equivalent non FT product?
- |                                   |                                    |                                    |
|-----------------------------------|------------------------------------|------------------------------------|
| <input type="checkbox"/> 0 euro   | <input type="checkbox"/> 100 euros | <input type="checkbox"/> 250 euros |
| <input type="checkbox"/> 50 euros | <input type="checkbox"/> 150 euros | <input type="checkbox"/> 500 euros |
| <input type="checkbox"/> 75euros  | <input type="checkbox"/> 200 euros |                                    |
30. Assuming to shop once a week for food products and to have a world shop at 15 minute additional distance than a non FT outlet, how much are you willing to spend in excess per month for a FT product with respect to an equivalent non FT product?
- |                                   |                                    |                                    |
|-----------------------------------|------------------------------------|------------------------------------|
| <input type="checkbox"/> 0 euro   | <input type="checkbox"/> 100 euros | <input type="checkbox"/> 250 euros |
| <input type="checkbox"/> 50 euros | <input type="checkbox"/> 150 euros | <input type="checkbox"/> 500 euros |
| <input type="checkbox"/> 75euros  | <input type="checkbox"/> 200 euros |                                    |
31. Assuming to shop once a week for food products and to have a world shop at 30 minute more distance than a non FT outlet, how much are you willing to spend in excess per month for a FT product with respect to an equivalent non FT product?
- |                                   |                                    |                                    |
|-----------------------------------|------------------------------------|------------------------------------|
| <input type="checkbox"/> 0 euro   | <input type="checkbox"/> 100 euros | <input type="checkbox"/> 250 euros |
| <input type="checkbox"/> 50 euros | <input type="checkbox"/> 150 euros | <input type="checkbox"/> 500 euros |
| <input type="checkbox"/> 75euros  | <input type="checkbox"/> 200 euros |                                    |
32. Assuming to shop once a week for food products and to have large scale distribution selling FT products at the same distance of a non FT outlet, how much are you willing to spend in excess per month for a FT product with respect to an equivalent non FT product?
- |                                   |                                    |                                    |
|-----------------------------------|------------------------------------|------------------------------------|
| <input type="checkbox"/> 0 euro   | <input type="checkbox"/> 100 euros | <input type="checkbox"/> 250 euros |
| <input type="checkbox"/> 50 euros | <input type="checkbox"/> 150 euros | <input type="checkbox"/> 500 euros |
| <input type="checkbox"/> 75euros  | <input type="checkbox"/> 200 euros |                                    |
33. Assuming to shop once a week for food products and to have large scale distribution selling FT products at 15

minutes additional distance than a non FT outlet, how much are you willing to spend in excess per month for a FT product with respect to an equivalent non FT product?

- 0 euro       100 euros       250 euros  
 50 euros       150 euros       500 euros  
 75euros       200 euros

34. Assuming to shop once a week for food products and to have large scale distribution selling FT products at 30 minutes additional distance than a non FT outlet, how much are you willing to spend in excess per month for a FT product with respect to an equivalent non FT product?

- 0 euro       100 euros       250 euros  
 50 euros       150 euros       500 euros  
 75euros       200 euros

- 3.000 – 3.500  
 3.500 – 4.000  
 4.500 – 5.000  
 5.000 – 5.500  
 5.500 - 6.000  
 > 6.000

**Household:**

- SINGLE  
 2 PERSONS  
 3 PERSONS  
 4 PERSONS  
 5 PERSONS  
 > THAN 5 PERSONS

**Faith:**  BELIEVER  
 NON BELIEVER

**Are you active and/or do you belong to:**

- ORGANISATION, ASSOCIATION OR GROUP OF NON CONFESSONAL VOLUNTEERS  
 ORGANISATION, ASSOCIATION OR GROUP OF CONFESSONAL VOLUNTEERS  
 POLITICAL PARTY  
 NGOs

### Consumers personal information

**Region:** \_\_\_\_\_ **City:** \_\_\_\_\_

**Province:** \_\_\_\_\_

**AGE:** \_\_\_\_\_

**Sex:**  MALE  
 FEMALE

**Professional status:**  MAN.WORKER     PROFESSIONAL  
 CLERK                       RETIRED  
 EXECUTIVE  
 STUDENT  
 ENTREPRENEUR  
 UNEMPLOYED  
 OTHER \_\_\_\_\_

**Education :**  ELEMENTARY SCHOOL  
 MIDDLE SCHOOL  
 HIGH SCHOOL  
 UNIVERSITY DEGREE

**Net monthly household income:**  < 1.500 €  
**(wage,+/-rents,+/-interests )**  1.500 – 2.000  
 2.00 – 2.500  
 2.500 – 3.000