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## Socially Responsible Products: What Motivates Consumers to Pay a Premium?

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### Abstract

The motivation to pay a premium for socially responsible products is partly an expression of consumer concern for the well-being of those involved in the production process. Thus, choosing to buy a product with a socially responsible label and choosing to donate to a charity are similarly motivated actions. While there is an extensive literature on the economics of charitable giving that examines motivations to donate as well as on the impacts of labeling on consumer demand, there is very little overlap between the two literatures. In this paper we attempt to bridge these two literatures by investigating whether consumers have heterogeneous motivations for paying a premium. We design a lab experiment that auctions coffee with hypothetical socially responsible labels that put different weights on in-kind vs. cash transfers. We find that those consumers who prefer to restrict most of the premium to be an in-kind transfer (and are classified as paternalistic altruists) are willing to pay a 52.5% price premium over standard coffee. Those who prefer that most of the premium is paid as cash to the recipient (strong altruists) are willing to pay a 42.5% premium. Finally, those who are indifferent to how the premium is spent by the recipient (warm-glow givers) are willing to pay only a 19.2% premium. We discuss the implications of our results and future research directions.

JEL codes: D12, M3, Q11

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## **Socially Responsible Products: What Motivates Consumers to Pay a Premium?**

Socially responsible certification schemes have become a popular way to provide value added to commodities produced by small farmers in developing countries. Under these schemes, certified producers are required to meet certain conditions, usually in accordance with social and environmental criteria, in exchange for higher prices for their products. Some examples of social certification schemes include Fair Trade, Equal Exchange, UTZ Certified, Organic, and Rainforest Alliance. The most widely recognized label is Fair Trade with over 1.2 million certified farmers worldwide benefiting about 6 million people directly in 63 countries (Fairtrade International, 2010).

Past research has documented that consumers are willing to pay a significant premium for products carrying socially responsible labels (e.g., De Pelsmacker et al., 2005; Van Loo et al., 2014; Loureiro and Lotade, 2005; Elliot and Freeman, 2003). What is less well understood is the motivation for why consumers are willing to pay such premiums. While there is an extensive literature on both the motivations for charitable giving and the impacts of food labeling on consumer demand, there is very little overlap between the two literatures. This overlap is the topic of this paper.

The premium people pay for products labeled as socially responsible is not, of course, a purely charitable donation. However, the motivation to pay a premium for such products is an expression of consumer concern for the well-being of those involved in the production process. We contend that choosing to buy a product with a socially responsible label and choosing to donate to a charity are similarly motivated actions. Of the voluminous research concerning why people donate to charitable organizations (see Bekkers and Wiepking, 2010 for a review), some studies have defined different types of altruism which explain individuals' motivations for giving (Burton

and Schitz, 1978; Steinberg, 1991; Ribar and Wilhelm, 2002; Gruber and Hungerman, 2007). At one end of the spectrum, *pure altruists* are motivated solely by their concern for the well-being of recipients and receive the same utility regardless of how and by whom the donation is made. At the other end of the spectrum are *warm-glow* givers, whose interest in giving is purely egotistical and do not care about the recipient, but rather derive positive utility solely as the result of giving (Andreoni, 1989 and 1990). In the middle of the spectrum are *paternalistic altruistic* donors, who care about the recipient, and consider giving to be important, but also like to know and thus restrict how the donated money is spent. This spectrum is useful because it allows researchers to query and categorize charitable behaviors, but it has not yet been applied to an examination of consumers' willingness-to-pay (WTP) for socially responsible products, despite such products' growing popularity. Does the spectrum apply equally to charitable giving and to paying a premium for a socially responsible product? If so, which category of motivation—*purely altruistic*, *warm-glow*, or *paternalistic altruistic*—moves a consumer to pay the highest premium? Are these motivations heterogeneous, and, if so, are there any significant demographic and attitudinal characteristics associated with each type? The answers to these questions can help producers of socially responsible products optimize the intended effect of their work on consumers' buying decisions and are the focus of this paper.

To pursue these answers, we conduct an economic experiment using 148 subjects (non-undergraduate students) who were asked to bid on various coffee products that carried hypothetical socially responsible labels that placed different weights on cash vs. in-kind transfers. The first product, hypothesized to be most attractive to givers closest to the “pure altruistic” end of the spectrum, was one pound of “Sustainable Trade 10” coffee (ST10). The price of this product included a premium 90% of which was a cash transfer to the grower with the remaining 10% being

allocated to a public project (having to do with education and health care) in the community where the coffee was grown. The second product, hypothesized to be most attractive to paternalistic altruists, was one pound of “Sustainable Trade 90” coffee (ST90). The price of this product also included a premium, but almost all of it (90%) was allocated towards a public health and education project in the community where the coffee was grown, while the remaining 10% would be given in cash to the grower. The final product auctioned off in the experiment was one pound of standard coffee from the same region as the other two products, but whose price did not include a premium payable to the grower and/or the grower’s community. Subjects’ WTP for each of the three coffee products was elicited using the Becker-DeGroot-Marschak (Becker, Degroot, and Marschak 1964) auction. Based on their reported WTP for different kinds of coffee, participants were then sorted into one of three categories: strong altruists<sup>1</sup>, paternalistic altruists and warm-glow givers. An econometric model was used to identify significant characteristics of each type of donor, in order to assess whether these characteristics bore any correlation with the donors’ motivations for paying a premium (or not).

Our findings indicate that subjects are heterogeneous in their motivations to pay a price premium for socially responsible products and that their WTP differs significantly. We find that paternalistic altruists are willing to pay a 52.5% price premium over standard coffee if they are able to restrict most of the premium to be an in-kind transfer (education/health project in grower’s community). Interestingly, paternalistic altruist preferences for in-kind transfer are very strong: they are not willing to pay any premium if most of the premium constitutes cash transfer to the growers. Strong altruists, on the other hand, are willing to pay a 42.53% premium if most of the

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<sup>1</sup> In our experimental setting we cannot unambiguously claim that a certain giving behavior exhibits “pure altruism”, instead, we classify people who exhibit strong preferences for cash relative to in-kind transfers as “strong altruists.” See Section 4 (Experimental Design) for more details on the classification.

premium is paid as cash to the grower to be spent at farmer's discretion. Finally, warm glow givers (who are indifferent to how the premium is spent by the recipient) are willing to pay a premium, however it is significantly lower than the two other groups (only 19.21%). In addition, we find that paternalistic givers exhibit certain demographic and attitudinal characteristics such as being non-Caucasian, identifying as politically liberal or moderate, and being a regular charity donor, among others. These results suggest that current social labeling schemes could benefit from improved understanding of consumer's intrinsic motivations to pay the premiums and allow producers to differentiate these labels to better serve the consumers and improve the transfers to producers of socially responsible products.

The remainder of this paper is organized as follows. In the next section, we review previous research on social-certification schemes, as well as alternative theories for donor motivations for giving. We also provide a simple theoretical framework for why consumers are willing to pay a premium for socially responsible goods. Then follows a discussion of our experimental design and empirical model, then our results, then a conclusive summary of our major findings and their implications.

## **Background**

Socially responsible certification labels seek to assure consumers that the product was produced in accordance with the social criteria promoted by the label. For example, Fair Trade labels imply that producers are paid a fair price for their products, while other socially responsible labels ensure that the production methods meet certain ethical and environmental criteria, e.g., Organic, UTZ (which recognizes sustainable farming), and Rainforest Alliance. The demand for socially responsible labeled products is significant: worldwide retail sales of the most popular such

label, Fair Trade, were estimated to be around 8.5 billion dollars in 2013 alone (Fairtrade International, 2013).

According to the existing literature on socially responsible labels, their popularity rests on the idea that consumers, through market mechanisms, can improve the welfare of producers in developing countries, as well as those producers' environments (Basu, Chau, and Grote 2003; Basu and Hicks 2008; Elliott and Freeman 2003; Loureiro and Lotade 2005; Taylor 2005; Moguel and Toledo 1999). Some consumers are willing to pay a price premium for socially responsible products, and producers, incentivized by the improved business terms and organizational structure, adhere to the production practices set by the certification agency (Ronchi 2002; Milford 2004; VanderHoff 2002; Raynolds, Murray, and Leigh Taylor 2004; Ruben and Fort 2012). The benefits to producers include higher prices paid for their products, longer-term business relationships, and improvements to their community (Becchetti, Castriota, and Michetti 2013; Becchetti and Costantino 2008; Castro 2001; Nelson and Galvez 2000). Meanwhile, consumers benefit from the knowledge that they have done something tangible to promote practices in accordance with their principles, by supporting producers and local communities in need.

A number of studies have investigated consumer preferences with respect to a variety of socially responsible products. Elliot and Freeman (2003) examined products promoting improved labor conditions and found that 80% of study participants were willing to pay a premium for such products. Hiscox and Smyth (2005) conducted a similar study and concluded that consumers were willing to pay a 20% premium for products whose labels indicated improved labor conditions. And a number of studies have been conducted on Fair Trade coffee, with the majority indicating a general willingness among consumers to pay a significant premium for it. For example, De Pelsmacker et al., 2005 and Hiscox et al., 2011 estimated acceptable premiums of 27% and 23%,

respectively, relative to non-certified coffee. Basu and Hicks (2008) as well as Laureiro and Lotade (2014) showed that the WTP for Fair Trade-certification coffee is higher than for the Organic certification. These studies provide overwhelming evidence that an important segment of consumers care about the social impact of their consumption and consequently are willing to pay significant premiums for products produced in accordance with certain ethical standards. However, there is little research on socially responsible labels that clarifies whether there are potential gains by further differentiating these labels according to an enhanced understanding of what motivates people—and furthermore, *which* people—to pay premiums for socially responsible products in the first place.

The separate but equally extensive literature on charitable donations in general examines people's motivations to give and establishes that these motivations vary significantly. Gangadharan et al. (2015) classify individual donors based on their motivations for giving and examine how these motivations impact giving. They find heterogeneous motivations for giving, along the spectrum previously described, i.e.: ranging from strongly altruistic givers to paternalistic altruists to warm-glow givers. Jacobsson et al. (2007) show that a vast majority of donors are of the paternalistic variety: 90% of the donors observed in their study expressed a desire to control how the donation's recipient would be allowed to spend the donated money. Batista et al. (2014) show that donors are willing to give 14% more when they have the option to give specific goods rather than cash. Jones (2014) shows that even when such paternalistic restrictions are expensive, a majority of subjects are willing to pay to restrict the use of a donation so that it cannot be spent on cigarettes, alcohol, or drugs. Using dictator game experiments, Fong et al., (2011) find that about 30% of participants are willing to incur a cost in order to learn why the recipients of their giving are in need. Fong et al. also show that when the information is free, the amount that



donors are willing to give to their “preferred” recipients (this preference having been determined by the free information) increases. De Oliveira et al. (2011) find significant evidence in favor of an underlying preference for giving: having given to one charity is the best predictor of likelihood to donate to other causes.

The implication of all of these studies is that some people are willing to give more to charitable causes if they feel more confident that the recipient legitimately needs their help and that donors can be diverse in their motivations for giving. In this paper we show that consumers choosing products with socially responsible certification schemes act similar to charity donors and are also likely to have heterogeneous motivations, which in turn influence their willingness to purchase socially responsible products and the premiums that they are willing to pay. Moreover, we examine possible links between demographic/attitudinal characteristics and their donation preferences, as the later can be used as a basis for more nuanced segmentation strategies for socially responsible products.

### **Donor Types: Theoretical Framework**

In this paper we aim to deconstruct the motivations for paying premiums for socially responsible products in order to identify consumer types and then determine if these types differ in their willingness to pay for socially responsible products. Below we sketch a simple theoretical model that allows us to categorize individuals into three groups depending on their donation preferences.

Consider the utility function  $U_i(x_i, \dots, x_n; h_i, \dots, h_n)$ . Utility is given by consumption of a private good,  $x$ , and consumption of public project  $h$  (in our case, support for community health and education projects) and  $i = 1 \dots n$  are the individuals in a society. The utility of individual  $i$  is

assumed to be increasing in own consumption of a private good  $x_i$ , and public project  $h_i$ . Let  $u_{x_j}^i = \frac{\partial U_i}{\partial x_j}$  and  $u_{h_j}^i = \frac{\partial U_i}{\partial h_j}$  be the marginal utilities of consumer  $i$  with respect to consumer  $j$ 's private good and public project consumption, respectively. Following Jacobsson et al (2007), we define:

*Pure/Strong Altruist.* Individual  $i$  is a pure altruist if  $\frac{u_{h_j}^j}{u_{x_j}^j} = \frac{u_{h_j}^i}{u_{x_j}^i}$ . That is, for a pure altruist,  $i$ 's marginal rate of substitution of  $j$ 's consumption for  $j$ 's public project is the same as  $j$ 's marginal rate of substitution of own consumption for own public project. Intuitively, a pure altruist is someone who only concerns herself with the welfare of the recipient. Given the possibility to give cash or the equivalent value of in-kind transfer, this person will always prefer to make a direct cash transfer, allowing the recipient, who best knows his own utility function to choose how to spend the money. In the empirical classification of donor types below, we label individuals who prefer to the majority of their premium to be a cash transfer as "strong altruists", since "pure altruist" is a theoretical construct and an extreme that we cannot claim to observe.

*Paternalistic Altruist.* Individual  $i$  is a paternalistic altruist if she is not selfish and if  $\frac{u_{h_j}^j}{u_{x_j}^j} \neq \frac{u_{h_j}^i}{u_{x_j}^i}$ .

Paternalistic altruism is public project focused if  $u_{x_j}^i = 0$  and  $u_{h_j}^i > 0$  or if  $\frac{u_{h_j}^j}{u_{x_j}^j} < \frac{u_{h_j}^i}{u_{x_j}^i}$ . In other words,  $i$ 's marginal rate of substitution of  $j$ 's consumption for  $j$ 's public project is greater than  $j$ 's marginal rate of substitution of own consumption for own public project. Intuitively, in this scenario, individual  $i$  does not "respect" the preferences of individual  $j$ . Paternalistic altruist wants to help the recipient but thinks that they know better than the recipient about what is best for them (i.e., they may believe the recipient is irrational and unable to make the optimal decision). Typically, paternalistic donor will prefer to restrict her donation, donating in kind rather than cash,

to help the recipient make a more optimal consumption decision (from the perspective of the donor).

*Warm-glow giver.* Individual  $i$  is considered to be selfish with respect to individual  $j$  if  $u_{xj}^i = 0$  and  $u_{hj}^i = 0$ . These type of donors are still willing to pay something for the social cause, but their motivation is more complex. As a warm-glow giver is egotistically motivated, she should be indifferent to how her donation is spent by the recipient. In our context warm-glow giver is indifferent between cash or in-kind transfer and cares only about the utility derived from the act of giving.

To test empirically whether people are motivated to pay a premium for socially responsible products due to strong, paternalistic altruism or warm-glow, we need to study a situation where subjects can choose the product that is associated with a restricted in-kind transfer and compare to a scenario where cash transfer is available to the recipient. In such situation a strong altruist would always prefer to donate cash, whereas a paternalistic altruist will always prefer to donate in-kind. Next section describes the experiment that allows us to infer these preferences.

## **Experimental Design**

A total of 148 adult (non-undergraduate student) subjects participated in the experimental sessions. Participants were paid \$25 and were informed that they could keep the cash and/or use part of it to purchase various types of coffee products presented in a series of auctions. The subjects were recruited through advertisements posted in the primary news publication distributed to staff members at our university. Subjects were seated randomly at individual computer terminals with privacy shields and were informed that all decisions they made would be kept strictly confidential. After signing a consent form, participants were instructed to read the instructions for the

experiment, which was followed by an oral presentation about the experiment including the amount of money they would earn and the rules of the experiment (the appendix includes all informational materials used in the experiment).

The experiment consisted of three auctions conducted for one pound coffee products. All coffees, obtained from a specialty coffee roaster, were produced in the same region in Guatemala. The coffee was packaged in transparent plastic bags with no brand displayed so as to not bias WTP towards a brand. The three products included Sustainable Trade 10 (ST10), Sustainable Trade 90 (ST90), and standard coffee all in one-pound packages. The public project that Sustainable Trade coffee contributes to was defined broadly as a health and education project in the grower's community, benefiting both producers and non-producers. Information about the scale of the project or the number of beneficiaries was not given. The specific information that was given about ST10 and ST90 coffees is summarized in Table 1. The hypothetical labels ST10 and ST90 were designed to place different weights on in-kind vs. cash transfer. While the mix of the two types of transfer in both of the labels doesn't allow us to infer the absolute preferences for in-kind vs. cash transfers, 90%-10% weights give us a good approximation for the strong leanings towards paternalistic or strong altruistic preferences.

[Table 1 here]

The Becker-DeGroot-Marschak (BDM) auction was used to elicit subjects WTP for each product. The BDM auction is ideal for this experiment because it is incentive compatible in an expected utility framework and is demand-revealing. Subjects were instructed to enter a bid for each coffee product on their computer, where bids could range from \$0 to \$25. Then, a random number between \$0 and \$25 was generated, which became the "price" for that auctioned product. Subjects were instructed that if their bids were at or higher than the random price, they received

the item and would pay the price not their bid. If subjects' bids were higher than the price, they did not receive the product. Several examples of how the BDM works were presented to the participants and questions about this auction were answered prior to conducting the auctions in order to insure that participants understood the auction mechanism. Because subjects could place a bid of up to \$25 per product, we did not want the value of their bids to exceed their \$25 participation endowment. Therefore, to prevent this type of budget constraint on subjects' bidding activity, participants were informed that only one of the auctions would result in an actual transaction, and that these auctions would be randomly chosen at the end of the experiment. The order of these three products in the auctions for each session was randomly chosen, and we found no significant ordering effects in the subsequent regression analysis. We presented the coffee types sequentially providing a description of the product and the way the price premium is allocated.

At the end of the coffee auctions, participants were required to complete a questionnaire displayed on their computer screens before receiving payment and the pound of coffee in case they had placed a winning bid. The survey questions, which are included in the appendix, elicited routine demographic and attitudinal information to be used in the regression analysis as control variables. After all subjects finished the survey, the binding auction and the market price for the product were selected randomly. The winners received a pound of coffee plus the difference between the market price and the \$25 endowment. Subjects whose bid was lower than the market price did not receive the pound of coffee and kept the initial \$25.

## **Empirical Model**

We obtain parameter estimates from a random effects Generalized Least Squares (GLS) model to examine how heterogeneity in consumer motivation to donate influences willingness to pay for standard, ST10 and ST90 coffee. We employ random effects GLS models to account for possible unequal variance in the error terms due to unobserved heterogeneity across subject participants (Kmenta, 1985). We estimate consumer WTP for a pound of coffee with the alternative labels (standard, ST10, ST90) for the complete sample and for subsamples of each donor type (paternalistic altruists, strong altruists, and warm-glow givers), while controlling for subject demographic and behavioral variables. Mathematically, the model yields:

$$Bid_i = \beta_1 + \beta_2 DST10_i + \beta_3 DST90_i + \beta_4 Age_i + \beta_5 Female_i + \beta_6 Income_i + \beta_7 Education_i + u_i + \varepsilon_i \quad (1)$$

where  $i$  represents the subject;  $DST10$  and  $DST90$  are dummy variables for coffee types ST10 and ST90, respectively;  $Age$  is the age of the participant;  $Female$  is a dummy variable that equals one if the respondent is female, zero otherwise;  $Income$  and  $Education$  are a categorical variables measuring income and education respectively (see table 2 for definitions)  $Education$  measures the education level of the participant, it ranges from 1 to 4. The random component of the intercept,  $u_i$ , and the error term,  $\varepsilon_i$ , are assumed to be normally distributed with mean zero and variances  $\sigma_u^2$  and  $\sigma_\varepsilon^2$ , respectively. We employ equation (1) to estimate parameters for the complete sample and for subsamples of each donor type.

We specify a multinomial logit model to examine consumer demographic and behavioral characteristics associated with each donor type. Let  $g$  represent the donor type ( $g=1, 2, 3$  for paternalistic altruists, strong altruists and warm glow givers, respectively). Therefore, the probability of an individual  $i$  being in a group  $g$  is estimated as:

$$Prob(choice_i = g|X_i) = \frac{e^{\beta'_g X_i}}{e^{\beta'_1 X_i} + e^{\beta'_2 X_i} + e^{\beta'_3 X_i}} \quad (2),$$

where  $\mathbf{X}$  is a vector of demographic and behavioral characteristics and  $\boldsymbol{\beta}$  is the vector of parameters to be estimated. Specifically, the variables that are hypothesized to influence the probability of being a donor type include age (*Age*), gender (*Female*), education level (*Education*), and income bracket (*Income*), as defined above.<sup>2</sup> In addition, equation (2) includes such consumer characteristics as race/ethnicity (*NonCaucasian* equals 1 if the individual is non-Caucasian, zero otherwise); political preferences (*Conservative* equals 1 if a person stated conservative preferences, zero otherwise); whether the consumer makes regular donations to charities, excluding church donations (*Donor* equals 1 if the person donates regularly to charities excluding church donations, zero otherwise); the importance of a coffee blend when purchasing coffee, as a proxy for appreciation for coffee quality (*BlendCoffee*, which ranges from 1 ‘not important’, to 10 ‘very important’); and attendance to religious celebrations (*ReligionCelebMany* equals 1 if the individual attends three or more religious celebrations per month and zero otherwise).

We employ warm glow giver as the basis for comparison (i.e. being a warm glower is the excluded variable, or  $\boldsymbol{\beta}_3 = \mathbf{0}$ ). Thus the parameter estimates provide the estimates of the log-odd ratios of being paternalistic altruist and strong altruists relative to the probability of being classified as a warm glow giver. We only need two vectors of  $\boldsymbol{\beta}$  to estimate the three group probabilities.

The two log-odds ratios to estimate are

$$\ln \left[ \frac{\text{Prob}(g_i=1)}{\text{Prob}(g_i=3)} \right] = X_i' \boldsymbol{\beta}_1 \quad (3)$$

$$\ln \left[ \frac{\text{Prob}(g_i=2)}{\text{Prob}(g_i=3)} \right] = X_i' \boldsymbol{\beta}_2 \quad (4)$$

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<sup>2</sup> We have experimented with including different sets of demographic/attitudinal variables and found no significant differences in estimated parameters of interest.

Finally, we employ these parameter estimates to calculate marginal effects on how consumer demographic and behavioral characteristics impact the probabilities of being classified as paternalistic altruists, strong altruists, and warm glow givers.

## **Results**

Descriptive statistics of the sample are shown in Table 2. Among the 148 people, 15 participants were not willing to pay a premium for either ST90 or ST10 coffee, and were excluded from the subsequent analysis. The majority of the participants were Caucasian (54%), and female (63%). Asians, at 37% of the sample, were the second largest ethnic group, followed by African Americans (3%). The average age of the participants was 29.3 years, ranging from 21 to 61, and 17% of them reported to have at least one child. Most of participants' yearly income was less than \$40,000 (38%), followed by the income group between \$40,000 and \$80,000 (34%). The majority of participants had undergraduate education (47.37%) as the highest degree obtained, and 12.7% had either high school or associate degrees. More than half considered themselves liberals (54%). Among the participants, 53% stated that they regularly donate to charities (excluding their church).

[Table 2 here]

Table 3 presents the estimated coefficients from the random effects GLS regression of coffee bids on ST10, ST90, and subject demographic characteristics for the entire sample, strong altruists, paternalistic altruists, and warm-glow givers. Similar to previous studies (e.g., De Pelsmacker et al., 2005; Van Loo et al., 2014; Loureiro and Lotade, 2005; Elliot and Freeman, 2003), our overall results indicate that consumers are willing to pay a premium for socially responsible products and we find very similar magnitudes of premiums as in prior studies. As is indicated in Table 3 (column 1), the average bids for ST10 and ST90 coffee were \$1.51 and \$1.67 higher, respectively than their WTP for standard coffee. These premiums were both statistically



significant at the 1 percent level, and the WTP represent 21 percent and 23.1 percent premiums over the standard coffee price for ST10 and ST90, respectively. The results also indicate that subjects are willing to pay a higher premium for ST90 than ST10. However, this difference is not statistically significant.

[Table 3 here]

To provide more insight on how different motivations influence these premiums, we divide the subjects who were willing to pay a premium for ST10 and/or ST90 coffee into one of three categories based on their WTP for ST10 vs. ST90. Subjects who bid more for ST90 than ST10 were categorized as paternalistic altruists because this product placed most restrictions on the donation – 90% was restricted to be an in-kind transfer. Subjects who bid more for ST10 than for ST90 were categorized as strong altruists because this product imposes less restrictions on the donation (i.e. 90% of the premium is given in cash to smallholder coffee farmers). Subjects who bid the same for ST10 and ST90 were categorized as warm-glow givers because they were indifferent to how their donation would be spent by the recipient<sup>3</sup>. We find that about 35% of our donor sample have preferences that are consistent with strong altruism, 38% - with paternalistic altruism, and the rest (27%) are indifferent between in-kind and cash transfers and are classified as warm-glow givers. For each category, a separate regression was run and the results are presented in Table 3 (columns 2, 3 and 4).

The results indicate that paternalistic altruists are willing to pay a price a premium of \$2.72 (52.51%) per pound of ST90 coffee relative to standard coffee, which is statistically significant at the 1 percent level. However, these same individuals are not willing to pay any premium for ST10 coffee. This suggests that paternalistic altruists will pay a significant premium when it is used to

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<sup>3</sup> It is also possible (and our model allows it) that warm-glow can be part of the motivation to give for people that we classify as strong altruists or paternalistic altruists. If that is the case, then the differential premiums between altruists and warm-glow givers can be interpreted as the lower bound for respective altruistic motives.

improve the community of the growers, but are not willing to pay a premium if it primarily constitutes a cash transfer to the grower. This result is consistent with the literature on charitable donations and paternalistic behavior (Gangadharan et al., 2015; Konow, 2010; Jacobsson et al., 2007). Column 3 in table 3 reports the results for strong altruists. The results show that strong altruists are willing to pay a price premium of \$2.63 (42.53%) per pound of ST10 coffee relative to standard coffee (statistically significant at the 1 percent level); but these subjects are willing to pay only a small 10% premium for ST90 coffee (marginally significant at 10 percent level). These findings suggest that strong altruists prefer to allocate the majority of their donations as a cash transfer to smallholder coffee growers (i.e., they believe individuals know better how to allocate additional income according to their preferences). These individuals donate several magnitudes less when the premium is primarily allocated to public goods to improve the welfare of the community. Lastly, the column 4 in table 3 reports the results for the warm glow givers. By definition, these individuals are indifferent between giving cash to growers or public goods to the growers' community. The parameter estimates suggest that individuals motivated by warm glow pay a price premium of \$1.46 (19.21%) for both, coffee labeled at ST10 and ST90 (parameter estimates are statistically significant at the 1 percent level). These results suggest, that egotistically-motivated consumers are willing to pay less than half of the premiums relative to altruistically motivated consumers. As indicated in table 3, none of the demographic variables in the model of all 3 types of givers influence WTP.

Taken together, parameter estimates in Table 3 provide interesting insights on how a person's motivation to donate may affect her willingness to pay a price premium for alternative labels. Specifically, altruists (both paternalistic and strong) are willing to pay the highest price premiums for coffee, which is more than two times higher than the price premium paid by warm glow givers. But strong altruists and paternalistic altruists have very strong preferences for one

type of coffee: if they are willing to pay a premium for one, they are not willing to pay a premium for the other. These results highlight the importance of carefully identifying consumer segments and the size of those segments based on motivations to donate in order to develop appropriate labeling strategies.

After examining the relationship between motivation to donate and WTP for alternative labels, a natural question relevant to marketing practitioners is: Are there specific consumer demographic and behavioral characteristics associated with each donor type? To shed light on this question, we use the demographic and attitudinal characteristics completed by subjects during the experiment. A multinomial logit model is specified to determine how these characteristics influence the probability of a consumer being classified into one of three groups: 1) paternalistic altruists, 2) strong altruists, and 3) warm glow givers.

[Table 4 here]

The parameter estimates and marginal effects of the multinomial logit are presented in table 4. Overall, the results indicate that some demographic and attitudinal characteristics influence a person's propensity of being a certain type of giver. For instance, the marginal effects indicate that people describing themselves as being politically conservative are 22% less likely to belong to the paternalistic group. Likewise, individuals who frequently attend religious celebrations have a 21% lower probability of being in the paternalistic group. In contrast, non-Caucasians have a 22% higher probability to be paternalistic altruists. Also, people who donate part of their income (excluding to their churches) have a 23% higher probability of being paternalistic. Interestingly, we also find that subjects who care about the type of blend when purchasing coffee have a 6% higher probability of being paternalistic than those who do not. This indicates that higher level of coffee expertise may be associated to being a paternalist altruist. While we find differences between paternalists and the other donor types, our parameter estimates suggest no differences

between the strong altruists and warm-glow givers, except that individuals observing more religious holidays are 24% more likely to be categorized as strong altruists.

### **Implications and Concluding Remarks**

Previous research has established that consumers are willing to pay significant premiums for socially responsible products. Another strand of well-established literature on the economics of charitable giving suggests that different types of altruism (that range from purely altruistic to purely selfish warm-glow motivated altruism) might explain heterogeneity in propensity to give and the level of charitable donations across individuals. In this research, we seek to link these two strands of literature and examine what motivates consumers to pay premiums for socially responsible products. We designed a lab experiment in which we auctioned off coffee with hypothetical socially responsible labels. Specifically, the two hypothetical labels put different weights on in-kind vs. cash transfers: in one, which we called “Sustainable Trade 90”, 90% of the premium was restricted to be an in-kind transfer (health/education project in a grower’s community) and 10% was allocated to be a cash transfer directly to the grower; in another (“Sustainable Trade 10”) the percentages were flipped: 90% was allocated towards cash transfer and 10% towards in-kind transfer. Based on the willingness to pay for these two products, we categorize subjects to be paternalistic altruists, strong altruists and warm glow givers. Individuals who prefer to place significant restrictions on premium transfers and donate in-kind are classified as paternalistic altruists. These individuals are interested in helping improve the recipients’ well-being, but they think that they know better than the recipient how the money should be spent. On the other hand, given the possibility to give cash or the equivalent value of in-kind transfer, a strong altruist will always prefer to make a direct cash transfer, allowing the recipient to choose how to spend the money. Finally, warm-glow givers are indifferent between cash or in-kind

transfer and care only about the utility derived from the act of giving per se.

Our experimental results indicate that, on average, individuals are willing to pay a 20-23% premium for both ST10 and ST90 coffee, which is consistent with previous studies on socially responsible products such as Fair Trade coffee. Furthermore, we find that there is significant heterogeneity regarding motivations to donate: about 35% of our sample have preferences that are mostly consistent with strong altruism, 38% with paternalistic altruism, and the other 27% are classified as warm-glow givers. Based on our results, paternalistic altruists are the most generous donors (willing to pay a 52.5% premium for ST90 coffee relative to standard coffee), but they are willing to give more money only when they can restrict their donations to be in-kind transfers. Interestingly, paternalistic altruists exhibit very strong preferences for restricting the donation – they are not willing to pay any premium for ST10 coffee designed to have the majority of premium transfer to be in cash. Strong altruists, on the other hand strongly prefer ST10 coffee and are willing to pay a 42% price premium over regular coffee. Finally, we find that individuals indifferent between these two donation schemes are willing to pay more than 2.5 times lower premiums (19%) relative to altruistically motivated individuals.

These findings have marketing implications for all (food and non-food) socially responsible products and suggest that current social labeling schemes could benefit from improved understanding of consumer's intrinsic motivations to pay the premiums. The main implication is that firms need to factor in the type of consumer to whom they are targeting their product when they craft their giving scheme and label. Our results suggest that socially responsible products that emphasize that their premium is devoted primarily to unrestricted cash transfer to the producer should target pure altruists. On the other hand, firms marketing socially responsible products with premiums primarily allocated to more restrictive projects such as building schools should be

targeted towards paternalistic altruists.

How can firms identify consumer characteristics that would enable them to segment the market to conduct the above strategy? While this is an area for further research, we addressed this issue by running a multinomial logit model to identify some demographic and behavioral characteristics that could be used to segment the market for socially responsible labels according to consumer motivations to donate. Our results suggest that some demographic and behavioral characteristics appear to influence consumers' probability of being paternalistic versus non-paternalistic givers. For example, we find that politically conservative people and people who attend religious celebrations regularly are less likely to belong to the paternalistic group. In contrast, non-Caucasians and people who have experience in donating have a higher probability of being paternalistic.

We believe that this paper is just a starting point in bringing some insights from charitable donations literature to investigations of socially responsible labels. While our experiment illustrates that the willingness to give via price premiums significantly differs among individuals, it gives limited insights about how these findings can be applied in the field. Future work should investigate how these results can be turned into actionable recommendations for producers, analyze the role of motivation to donate for other types of products beyond coffee, and consider a range of other allocation schemes.

## References

- Andreoni, James. 1990. "Impure Altruism and Donations To Public Goods: A Theory of Warm-Glow Giving." *Economic Journal* 100 (401): 464–77. doi:10.2307/2234133.
- Bacon, Christopher. 2005. "Confronting the Coffee Crisis: Can Fair Trade, Organic, and Specialty Coffees Reduce Small-Scale Farmer Vulnerability in Northern Nicaragua?" *World Development* 33 (3): 497–511. doi:10.1016/j.worlddev.2004.10.002.
- Basu, Arnab K., Nancy H. Chau, and Ulrike Grote. 2003. "Eco-Labeling and Stages of Development." *Review of Development Economics* 7 (2): 228–47. doi:10.1111/1467-9361.00188.
- Basu, Arnab K., and Robert L. Hicks. 2008. "Label Performance and the Willingness to Pay for Fair Trade Coffee: A Cross-National Perspective." *International Journal of Consumer Studies* 32 (5): 470–78. doi:10.1111/j.1470-6431.2008.00715.x.
- Becchetti, Leonardo, Stefano Castriota, and Melania Michetti. 2013. "The Effect of Fair Trade Affiliation on Child Schooling: Evidence from a Sample of Chilean Honey Producers." *Applied Economics* 45 (25): 3552–63. doi:10.1080/00036846.2012.727980.
- Becchetti, Leonardo, and Marco Costantino. 2008. "The Effects of Fair Trade on Affiliated Producers: An Impact Analysis on Kenyan Farmers." *World Development* 36 (5): 823–42. doi:10.1016/j.worlddev.2007.05.007.
- Becchetti, Leonardo, and Furio Camillo Rosati. 2005. "The Demand for Socially Responsible Products: Empirical Evidence from a Pilot Study on Fair Trade Consumers." Roma.
- Becker, Gordon M., Morris H. Degroot, and Jacob Marschak. 1964. "Measuring Utility by a Single-Response Sequential Method." *Behavioral Science* 9 (3): 226–32. doi:10.1002/bs.3830090304.

- Castro, J. E. 2001. "Impact Assessment of Oxfam's Fair Trade Activities. The Case of Productores de Miel Flor de Campanilla." Oxford.
- Cicia, Gianni, and Francesca Colantuoni. 2010. "Willingness to Pay for Traceable Meat Attributes: A Meta-Analysis." *International Journal on Food System Dynamics*. doi:10.18461/ijfsd.v1i3.138.
- Cranfield, John, Spencer Henson, James Northey, and Oliver Masakure. 2010. "An Assessment of Consumer Preference for Fair Trade Coffee in Toronto and Vancouver." *Agribusiness* 26 (2): 307–25. doi:10.1002/agr.20217.
- De Oliveira, Angela C.M., Rachel T.A. Croson, and Catherine Eckel. 2011. "The Giving Type: Identifying Donors." *Journal of Public Economics* 95 (5-6). Elsevier B.V.: 428–35. doi:10.1016/j.jpubeco.2010.11.012.
- De Pelsmacker, Patrick, Liesbeth Driesen, and Glenn Rayp. 2005. "Do Consumers Care about Ethics? Willingness to Pay for Fair-Trade Coffee." *Journal of Consumer Affairs* 39 (2): 363–85. doi:10.1111/j.1745-6606.2005.00019.x.
- Elliott, Kimberly Ann, and Richard B. Freeman. 2003. *Can Labor Standards Improve under Globalization?* Peterson Institute Press: All Books.
- "Fairtrade International Annual Report." 2015. <http://annualreport.fairtrade.net/en/>.
- Gangadharan, Lata, Philip J Grossman, and Kristy Jones. 2015. "Donor Types and Paternalism." Department of Economics Discussion Paper, Monash Universi. Vol. 53/14.
- Hiscox, Michael J., and Nicholas F. B. Smyth. 2011. "Is There Consumer Demand for Improved Labor Standards? Evidence from Field Experiments in Social Product Labeling."
- Jacobsson, Fredric, Magnus Johannesson, and Lars Borgquist. 2007. "Is Altruism Paternalistic?" *The Economic Journal* 117 (520): 761–81. doi:10.1111/j.1468-0297.2007.02049.x.



- Kmenta, J. (1986). *Elements of Econometrics* (Second ed.). New York: Macmillan. ISBN 0-472-10886-7.
- Konow, James. 2010. "Mixed Feelings: Theories of and Evidence on Giving." *Journal of Public Economics* 94 (3-4). Elsevier B.V.: 279–97. doi:10.1016/j.jpubeco.2009.11.008.
- Loureiro, Maria L., and Justus Lotade. 2005. "Do Fair Trade and Eco-Labels in Coffee Wake up the Consumer Conscience?" *Ecological Economics* 53 (1): 129–38. doi:10.1016/j.ecolecon.2004.11.002.
- M. Fong, Christina, and Felix Oberholzer-Gee. 2011. "Truth in Giving: Experimental Evidence on the Welfare Effects of Informed Giving to the Poor." *Journal of Public Economics* 95 (5-6): 436–44. doi:10.1016/j.jpubeco.2010.10.017.
- Milford, Anna. 2004. "Coffee, Co-Operatives and Competition: The Impact of Fair Trade."
- Moguel, Patricia, and Victor M. Toledo. 1999. "Biodiversity Conservation in Traditional Coffee Systems of Mexico." *Conservation Biology* 13 (1): 11–21. doi:10.1046/j.1523-1739.1999.97153.x.
- Nelson, Valerie, and Modesto Galvez. 2000. "Social Impact of Ethical and Conventional Cocoa Trading on Forest-Dependent People in Ecuador."
- Raynolds, Laura T., Douglas Murray, and Peter Leigh Taylor. 2004. "Fair Trade Coffee: Building Producer Capacity via Global Networks." *Journal of International Development* 16 (8): 1109–21. doi:10.1002/jid.1136.
- Ronchi, Loraine. 2002. "The Impact of Fair Trade on Producers and Their Organisations: A Case Study with Coocafe in Costa Rica."
- Rotaris, Lucia, and Romeo Danielis. 2011. "Willingness to Pay for Fair Trade Coffee: A Conjoint Analysis Experiment with Italian Consumers." *Journal of Agricultural & Food Industrial Organization* 9 (1): 1–20. doi:10.2202/1542-0485.1305.

- Ruben, Ruerd, and Ricardo Fort. 2012. "The Impact of Fair Trade Certification for Coffee Farmers in Peru." *World Development* 40 (3): 570–82.  
doi:10.1016/j.worlddev.2011.07.030.
- Taylor, Peter Leigh. 2005. "A Fair Trade Approach to Community Forest Certification? A Framework for Discussion." *Journal of Rural Studies* 21 (4): 433–47.  
doi:10.1016/j.jrurstud.2005.08.002.
- Van Loo, Ellen J., Vincenzina Caputo, Rodolfo M. Nayga, and Wim Verbeke. 2014. "Consumers' Valuation of Sustainability Labels on Meat." *Food Policy* 49 (December): 137–50. doi:10.1016/j.foodpol.2014.07.002.
- VanderHoff, Boersma F. 2002. "Poverty Alleviation through Participation in Fair Trade Coffee Networks: The Case of UCIRI, Oaxaca, Mexico." [www.colostate.edu/Depts/Sociology/FairTradeResearchGroup](http://www.colostate.edu/Depts/Sociology/FairTradeResearchGroup).

**Table 1. Information Treatments used in the Experiment**

Treatment	Narrative
Standard Coffee	<p>Standard Gourmet Coffee refers to coffee grown following regular farming practices produced in the Guatemalan rural community.</p>
Sustainable Trade 10 Coffee (ST10)	<p>Sustainable Trade 10 is a gourmet coffee brand that gives coffee growers a price premium above the normal price paid to growers.</p> <p>The price premium paid to coffee growers is divided into two parts:</p> <ul style="list-style-type: none"><li>• 90% is given to the grower in cash, and</li><li>• 10% is contributed to a health and education project in the grower's community.</li></ul> <p>Sustainable Trade 10 only buys its coffee beans from certified growers that comply with certain production and environmental standards.</p>
Sustainable Trade 90 Coffee (ST90)	<p>Sustainable Trade 90 is a gourmet coffee brand that gives coffee growers a price premium above the normal price paid to growers.</p> <p>The price premium paid to coffee growers is divided into two parts:</p> <ul style="list-style-type: none"><li>• 10% is given to the grower in cash, and</li><li>• 90% is contributed to a health and education project in the grower's community.</li></ul> <p>Sustainable Trade 90 only buys its coffee beans from certified growers that comply with certain production and environmental standards.</p>

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Source: Authors' experimental design

**Table 2. Descriptive Statistics**

Variable Name	Description	Mean/ Frequency (Standard Error in Parenthesis)				
		Complete Sample	Paternalistic Altruists	Strong Altruists	Warm-Glow Givers	
Bid	Bid for 1 lb. of Standard Coffee	\$5.43 (4.42)	\$6.14 (4.67)	\$5.34 (3.84)	\$4.51 (5.09)	
	Bid for 1 lb. of ST 10 Coffee	\$6.95 (5.02)	\$6.45 (4.06)	\$8.22 (4.97)	\$5.98 (6.04)	
	Bid for 1 lb. of ST 90 Coffee	\$7.10 (5.42)	\$8.86 (5.19)	\$6.03 (4.75)	\$5.98 (6.04)	
	Female	1= female	0.624 (0.486)	0.667 (0.476)	0.617 (0.491)	0.571 (0.502)
	Children	1= Have any children	0.173 (0.380)	0.157 (0.367)	0.191 (0.398)	0.171 (.382)
Donor	1= Donate to charities	0.534 (0.501)	0.627 (0.488)	0.489 (0.505)	0.457 (0.505)	
Religion celebrations	Religious celebrations attended per month	0.906 (1.828)	0.627 (1.216)	1.213 (2.368)	0.9 (1.723)	
Age*	Age of the participant	29.31 (9.27)	28.94 (8.20)	29.55 (8.92)	29.51 (11.25)	
	21-30	70.68%	68.63%	68.08%	77.14%	
	31-40	15.79%	19.61%	17.02%	8.57%	
	41-50	6.77%	7.84%	10.63%	0%	
	51-61	6.77%	3.92%	4.25%	14.29%	
Education*	High School	8.27%	5.88%	10.64%	8.57%	
	Associate's	4.51%	9.80%	0%	2.86%	
	Undergraduate	47.37%	45.10%	46.81%	51.43%	
	Graduate School	39.85%	39.21%	42.55%	37.14%	
Race or Ethnicity*	Caucasian	54.14%	45.10%	59.57%	60%	
	Asian	36.84%	45.10%	29.79%	34.29%	
	African American	3.01%	3.92%	4.25%	0%	
	Hispanic	1.50%	1.96%	0%	2.86%	
	Other	4.51%	3.92%	6.38%	2.86%	
Political affiliation*	Conservative	18.80%	11.76%	23.40%	22.86%	
	Liberal	54.14%	52.94%	57.45%	51.43%	
	Middle	27.07%	35.29%	19.15%	25.71%	
Income*	< \$40,000	38.35%	41.18%	36.17%	37.14%	
	\$40 - \$80,000	33.83%	29.41%	44.68%	25.71%	
	\$80 - \$120,000	15.04%	17.64%	8.51%	20%	
	>\$120,000	12.78%	11.76%	10.64%	17.14%	
N	Sample size	133	51	47	35	

Standard deviation in parenthesis. \* Values are shown in frequencies.

**Table 3. Random Effects Generalized Least Square Regression on Coffee Bids for All Sample and Each Altruistic Type**

Variable	Complete Sample	Paternalistic Altruists	Strong Altruists	Warm-Glow Givers
ST10	1.519*** (0.233)	0.307 (0.323)	2.877*** (0.396)	1.463*** (0.271)
ST90	1.670*** (0.233)	2.724*** (0.323)	0.681* (0.396)	1.463*** (0.271)
Age	-0.0177 (0.0442)	0.0343 (0.0839)	0.0367 (0.0738)	-0.0936 (0.0870)
Female	-0.695 (0.843)	0.0173 (1.393)	-0.751 (1.422)	-1.684 (2.027)
Income	-0.862** (0.349)	-0.443 (0.566)	-0.924 (0.609)	-0.893 (0.760)
Education	0.297 (0.476)	0.272 (0.813)	-0.0598 (0.785)	0.835 (1.186)
Constant	7.240*** (2.196)	5.187 (4.535)	6.764** (2.977)	7.612 (5.383)
Observations	399	153	141	105
Within R2	0.192	0.461	0.385	0.137
Overall R2	0.068	0.082	0.122	0.146
Chi-squared	69.81	86.33	60.52	43.79

Standard errors in parentheses. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

**Table 4. Marginal Effects of a Multinomial Logit Regression on Donor Type.**

Variable	Paternalistic Altruists	Strong Altruists	Warm-Glow Givers
Age	-0.005 (0.005)	0.002 (0.005)	0.003 (0.005)
Female	-0.034 (0.100)	0.045 (0.094)	-0.011 (0.087)
Education	-0.078 (0.056)	0.059 (0.054)	0.018 (0.048)
Income	-0.016 (0.039)	-0.019 (0.039)	0.036 (0.033)
Blend Coffee	0.062** (0.025)	-0.032 (0.023)	-0.03 (0.021)
Conservative	-0.224** (0.099)	0.131 (0.123)	0.092 (0.116)
NonCaucasian	0.219** (0.097)	-0.148 (0.093)	-0.071 (0.085)
Donor	0.233*** (0.091)	-0.115 (0.091)	-0.118 (0.085)
ReligionCelebMany	-0.215** (0.102)	0.240* (0.126)	-0.025 (0.110)

Standard Errors in Parenthesis. \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.  
 Observations= 133. Pseudo R2= 0.089. Chi-squared= 23.86

## Appendix. Experiment Instructions and Survey Questions

### **Instructions of a BDM auction**

Welcome to an experiment in consumer decision making. Please read these instructions carefully and refrain from communicating with other participants. Also, please do not use any software programs on your computer other than the spreadsheet we will use for our auctions, and refrain from using your cell phones during the experiment. As stated in the **Consent Form**, your participation in this experiment is voluntary and you can withdraw from this experiment at any time. **Please read and sign the consent form if you agree to participate in the experiment.**

You are going to participate in a series of auctions for 1 pound of different types of Guatemalan Gourmet coffee. It is very important that you follow the instructions and ask any questions you may have. In order to participate in the auction you need to familiarize yourself with the auction process first.

In the auctions, each participant will submit a bid for a product within a specified range. Next we will randomly select a market price for the product within that range. Those who bid equal or higher than the market price will win the auction and get the product being auctioned. They will pay the randomly drawn market price for the product (not their bidding price). The next two examples will help you familiarize with the auction mechanism.

### **Part A: Bidding for a One Dollar bill**

To better understand the auction process, you will participate in a **hypothetical** auction of **One Dollar Bill**.

You will be asked to bid your **maximum willingness to pay** for the One Dollar bill. You will type your bid (between 0 and 2 dollars) for the One Dollar bill on the screen and will click on the button to submit your bid.

It is important to understand that in order to maximize your earnings you should bid the true value of the One Dollar bill. To do that, you should obviously be willing to pay \$1.00 for the one dollar bill, so it is optimal to bid \$1.00. To illustrate why this is true, consider:

- If your bid is **\$0.80** and the market price is **above** \$0.80 and below \$1.00, then you do not “win” the One Dollar Bill. Thus you miss the opportunity to make a profit.
- If your bid is \$1.1 and the market price is **below** \$1.1, you win the One Dollar bill, but may end paying more than \$1 for it (e.g. if the market price is \$1.05).

**Therefore, it is in your best interest to place a bid equal to the value of the product being auctioned!**

### **Part B: Bidding for a Chocolate Bar**

In this second **hypothetical** auction you will bid for a Hershey’s Milk Chocolate bar shown by the experiment administrator. Suppose you have \$1 for this bid. You will submit a bid between \$0 and \$1 and will press the “BID” button when done. After everyone has submitted their bids, we will select a number randomly from \$0 to \$1. This number will become the chocolate’s market price. All bids equal to or above that market price will purchase the chocolate at the market price and keep the balance. The rest do not get the chocolate and keep the \$1.

## Part C: Coffee Auctions

We will auction 1 pound of different types of **Guatemalan gourmet coffee**.

At the beginning of each auction you will be given a definition of each type of gourmet coffee. You will be asked to answer two questions about the product. Next, you will be asked to place your **maximum willingness to pay** (between \$0 and \$25) for a 1 pound of the gourmet coffee.

After the auctions are completed, one person will draw a chip containing the various coffee products' numbers. The number drawn will represent the auction whose winners will be eligible for the exchange. Even though there will be more than one auction conducted; only one of them will be selected for the product exchange. Hence, you will purchase at most one pound of coffee.

Next, another person will draw a chip that will contain a number from 1 to 25. This will become the market price for the pound of coffee. Those who placed bids equal to or above the drawn market price will win that auction and purchase the coffee at the market price.

If you placed a winning bid in the selected auction (i.e. your bid was greater-or-equal than the market price), you will purchase the product at market price and you will receive the balance in cash (\$25 minus the market price). If you did not win the selected auction, you will receive \$25.

After the coffee auctions are completed, you will be asked to complete a survey. You will also be asked to complete a receipt to receive your payment and/or coffee. Finally, you will proceed to the administrator to get your product and the remaining balance.

Thank you for participating in this experiment!

### **Survey Questions**

1. What is your Religion? Catholic\_\_\_\_, Baptist\_\_\_\_, Methodist\_\_\_\_, Pentecostal\_\_\_\_, 7<sup>th</sup> Day Adventists\_\_\_\_, Mormon\_\_\_\_, Jehovah's Witness\_\_\_\_, Other\_\_\_\_(please specify)
2. What is your political affiliation? Liberal\_\_\_\_, Conservative\_\_\_\_, Middle-of-the-road\_\_\_\_, Other\_\_\_\_ (please specify)
3. How many times per month do you attend religious celebrations? \_\_\_\_\_
4. Do you consider yourself a regular coffee drinker? Yes\_\_\_\_, No\_\_\_\_
5. Do you drink coffee because you (select all that apply)?  
enjoy the flavor\_\_\_\_, created a habit\_\_\_\_, need it to stay awake\_\_\_\_, Other\_\_\_\_
6. Do you drink regularly espresso or espresso-based coffee drinks (cappuccino, latte)? Yes\_\_\_\_, No\_\_\_\_
7. Do you buy organic products regularly? Yes\_\_\_\_, No\_\_\_\_
8. Do you have any children? Yes\_\_\_\_, No\_\_\_\_ If Yes, how many?\_\_\_\_
9. Do you belong to any volunteer group? Yes\_\_\_\_, No\_\_\_\_
10. Do you donate regularly to institutions other than your church? Yes\_\_\_\_, No\_\_\_\_
11. Approximately what percentage of your income do you donate to charities other than your church?\_\_\_\_
12. Approximately how many hours per month do you do volunteer work?\_\_\_\_\_



For questions 18 to 26: On a scale of 1 (not important) to 10 (very important), please rank how much weight you place on the following attributes when purchasing coffee:

13. Color \_\_\_\_
14. Taste \_\_\_\_
15. Roast \_\_\_\_\_
16. Region where they were produced \_\_\_\_
17. Packaging \_\_\_\_\_
18. Price \_\_\_\_\_
19. Producer's Conditions \_\_\_\_\_
20. Brand\_\_\_\_\_
21. Type of Blend\_\_\_\_\_