



**FACULTEIT ECONOMIE
EN BEDRIJFSKUNDE**

**HOVENIERSBERG 24
B-9000 GENT**

**Tel. : 32 - (0)9 - 264.34.61
Fax. : 32 - (0)9 - 264.35.92**

WORKING PAPER

Are fair trade labels good business ? Ethics and coffee buying intentions

Patrick De Pelsmacker ¹

Liesbeth Driesen ²

Glenn Rayp ³

January 2003

2003/165

¹ Universiteit Antwerpen Management School and Ghent University

² Ghent University, Faculty of Economics and Business Administration and SHERPPA.

³ Ghent University, Faculty of Economics and Business Administration and SHERPPA.

Corresponding author: Glenn Rayp, Ghent University, Faculty of Economics and Business Administration, Hoveniersberg 24, 9000 Gent, e-mail: glenn.rayp@rug.ac.be

The authors would like to thank an anonymous referee for useful comments and remarks. All remaining errors are evidently ours. Financial support of the University Development Cooperation program of the Flemish Interuniversity Council is gratefully acknowledged.

Abstract

On the basis of a sample of 808 Belgian citizens and using conjoint analysis, the importance of a 'fair trade' label for the coffee buying decision is studied, as well as the willingness-to-pay for such a label. Furthermore, the size of the consumer segment willing to buy 'fair trade' coffee and their characteristics are studied. On average, a fair trade label is considered to be the second most important coffee attribute, together with flavor, and almost as important as the brand. Ten percent of the sample is willing to pay at least the actual price premium for fair trade coffee (27%). On the basis of the relative importance they attach to various coffee attributes, coffee buyers can be divided into four segments: fair trade lovers (11%), fair trade likers (40%), flavor lovers (24%) and brand lovers (25%). A number of demographic characteristics are measured, as well as the personal values of the respondents (Rokeach). Five basic dimensions of personal values can be distinguished: civic spirit, competence, sincere and social, idealistic, and personal gratification. Fair trade lovers are relatively highly educated, and the 31-44 years age group is over represented. They score higher than the other segments on personal values such as idealism, but lower on the dimension 'civic spirit'. The characteristics of fair trade likers are not significantly different from the average in the sample, except for their higher degree of idealism.

Keywords : fair trade, coffee buying behavior, ethical production, ethical consumption, personal values, conjoint analysis

Introduction

For the past thirty years several attempts have been made to describe consumers in terms of their concern about societal problems (Roberts, 1996). As society changed, this concern shifted towards other topics. There was the socially conscious or socially responsible consumer in the seventies (Anderson and Cunningham, 1972), whose range of action did not reach further than his own community. From the late eighties on, however, environmental disasters gave birth to the green consumer (Smith, 1990; Vowles, 2000). Finally, in the past ten years, the ethical consumer sees a more direct link between what is consumed and the social problem itself. This kind of consumerism incorporates environmental issues but extends the concern to animal welfare, human rights, and working conditions in the Third World (Strong, 1996; Tallontire et al., 2001).

In general, the ethical consumer feels responsible towards society and expresses these feelings by means of his purchase behavior. When companies have bad social records, consumers can decide not to buy their products. Boycott campaigns against Nike because of their alleged labor abuses and Nestlé because of the infant formula issue, are the most cited (Creyer, 1997; Shaw and Clarke, 1999; Strong, 1996; Auger et al., 1999; Carrigan and Attalla, 2001; Crane, 2001). On the other hand, companies expressing corporate social responsibility (CSR) give incentives to positive purchase behavior by means of codes of conduct and social or fair-trade labels on products (Tallontire et al., 2001). Creyer (1997) found that the ethicality of a firm's behavior is an important consideration during the purchase decision. In spite of the lack of evidence of the relation between corporate social responsibility and financial performance, it is believed that it pays off if put in a strategic perspective (Burke and Logsdon, 1996). The idea of broadening the focus of a company's activities beyond immediate interest groups, such as customers and shareholders, to embrace employees, suppliers, the local community and even competitors, is called the stakeholder model. A new consensus, acknowledging the value of a "stakeholder" approach to business transactions, has emerged (Whysall, 2000). In times when government capabilities for solving social problems are called into question, the business sector is expected to take up her responsibilities. The cost of ignoring corporate social responsibility may well be survival (Anderson and Cunningham, 1972). Moreover, CSR produces excellence (Robin and Reidenbach, 1987). As Gaski (1999) wrote: "the ethics of one day may be the law of the next". Reviewing the literature of the past decades, he finds that marketing and the law coincide with what is considered as being ethical. Many consumers already think that acting within the law is the same as acting ethical (Carrigan and Attalla, 2001).

It is of high importance for companies to know whether the group of ethical consumers is large enough to focus upon. Should or should they not attune their business ethics to the call for more corporate social responsibility? Evidence of a growing market segment for ethical products is sought in the increased availability of ethical products and in opinion polls and other studies. They claim that the part of consumers who buy more ethical products is increasing. According to a MORI poll for the Co-operative Bank 51% of the respondents have the feeling of being able to make a difference in a company's behavior and 68% have bought a product or a service because of the company's responsible reputation (Hines and Ames, 2000). On average, 46% of the European consumers also claim to be willing to pay substantially

more for ethical products (MORI, 2000). American consumers agree with a price increase of 6.6% for green products (The Roper Organization, 1990), while French consumers want to pay 10% to 25% more for apparel not made by children (CRC, 1998). Bird and Hughes (1997) tone these findings down. They claim that the willingness to purchase goods based on their ethical credentials is limited to a small minority of shoppers.

With these studies in mind, one could expect a high demand for ethical products. However, the opposite seems to be the case. Most of the ethical labeling initiatives like organic food, products free from child labor, legal logged wood and fair-trade products often have market shares of less than 1% (MacGillivray, 2000). This is due to the attitude-behavior gap. It is well documented that attitudes alone are generally a poor predictor of marketplace behavior (Cobb-Walgren and Ruble, 1995). On the other hand, consumer perceptions clearly influence behavioral manifestations. In the case of ethical products, the most important reason to explain the difference between attitude and behavior can be that the ethical criterion is just not taken into account and that respondents give socially desirable answers. Price, quality, convenience and brand familiarity are still the most important decision factors (Roberts, 1996; Tallontire et al., 2001; Carrigan and Attalla, 2001; Norberg, 2000; CRC, 1998). It is true that some consumers employ hierarchical decision-making methods and therefore refuse to buy products with an unethical background. Indeed, the ethical aspect of a product is increasingly becoming expected rather than being just another extra attribute (Crane, 2001). But the majority of people evaluate product attributes jointly in making the purchase decision (Sriram and Forman, 1993). They studied what types of product attribute trade-offs consumers are prepared to make for the sake of the environment. They found that consumers place high value on a product's environmental attributes when the product is frequently purchased while the environmental feature is of less importance when a high involvement product is purchased. A study by Dickson (2001) compares the importance of the No Sweat label in comparison with other salient product characteristics. She found that only a small part of consumers actually take the label into account. Other reasons suggested are lack of availability of ethical products, disbelief of ethical claims and lack of information. It is not known whether the ethical criterion is important enough to influence purchase decisions. And if it is, the amount of ethical consumers stays unclear.

Although fair-trade is an issue of particular concern for the ethical consumer (Shaw and Clarke, 1999), and fair trade labeled products are widely available in the shops (especially coffee), the relative importance of a fair-trade label in the purchase decision of consumers has not yet been researched. Coffee is taken as an indicative commodity of fair-trade. Although fair-traded coffee only represents 0.01 % of the world coffee production, it does involve two hundred co-operatives worldwide (Bird and Hughes, 1997).

Fair-trade is a very specific subject in the ethicality debate. Although the concept incorporates environmental and social issues, fair trade is communicated to the public through its most important element: fair prices for small farmers. *In essence, it comprises buying products from peasant producers on terms that are relatively more favorable compared to commercial terms, and merchandising them in*

developed countries at an “ethical premium” (Bird and Hughes, 1997). Consumers can identify fairly traded goods in shops by searching for a fair-trade label.

Research question

Eliminating social desirability as far as possible, this study tries to investigate whether consumers take the fair-trade attribute (i.e. a label) into account when purchasing coffee, what they want to pay for it, who they are and how many they are. It gives companies a broader idea to what extent ethical consumers have to be taken seriously and how they can address them.

The specific contribution of this study is, first of all, the use of a large and diversified sample. Secondly, this study goes beyond the traditional demographic variables to characterize the fair-trade consumer, for which in addition personal values are used. Finally, this study is not based on attitudes but on behavioral intentions. Conjoint analysis, a more sophisticated alternative for the traditional scenario technique, is used to simulate real consumer decisions. By answering four questions, this paper tries to give a clearer view on the perceptions and preferences of potential customers

1. *What is the importance that consumers adhere to a fair trade label as an attribute of coffee in their purchase decision compared to other attributes such as brand, blending, flavor and package?*

Considering an ethical label as an attribute is in line with the augmented product concept (Crane, 2001). Apart from the tangible features of a product, consumers seek other benefits. A brand may be one, but a fair-trade label can be another. For some consumers the latter can give the product a considerable augmentation, but others are indifferent to the ethical value added, or do not want to pay a price premium for it.

2. *What is their willingness-to-pay for the fair-trade attribute?*

A fair-trade coffee label needs to be efficiently monitored and subjected to third party certification in order to become credible. It implies additional costs and a price premium and as a consequence, as long as these are qualified as excessive, the concept of fair trade is not financially viable.

3. *What is the size of the segment of fair trade consumers?*

There is a tendency to assign consumers to groups, according to their ethical attitude. The Roper Organization (1990) finds that a considerable segment, the “true blue” greens and the “greenback” greens, is convinced that individual actions can make a difference in protecting the environment, while the “sprouts” are concerned but do not believe they can exert much influence. Two additional segments, the “grouzers” and the “basic browns”, are indifferent to environmental problems, but the former try to rationalize their behavior. Roberts (1995 and 1996) comes with a similar segmentation for socially responsible consumers in general. Also Cowe and Williams (2000) identify five groups of ethical consumers according to their attitude. In this study, consumers are segmented and the size of the ethically behaving segment is estimated.

4. *Are consumers of fair-trade coffee different from other consumers in terms of demographic features and personal values?*

For marketing reasons, several studies have tried to identify the socially responsible consumer in terms of demographic features. The generally accepted profile of the ethical consumer is a person with a higher income, who is more educated, with a prestigious occupation and who is better informed (Maignan and Ferrell, 2001; Roberts, 1996; Carrigan and Attalla, 2001). Roberts (1995) made an extensive overview of the numerous segmentation attempts. His conclusion was that demographics are not very significant in defining the socially responsible consumer because the concern and awareness have become widespread. Ethical decision-making is not influenced by gender (MORI, 2000; Tsalikis and Ortiz-Buonafina, 1990; Sikula and Costa, 1994). Anderson and Cunningham (1972) found that younger consumers are more socially conscious, while the effect of education level is not clear and income was of no relevance. Vitell et al. (2001) found no effect of age and income on consumer ethics, but higher education seemed to have a positive effect. Dickson (2001) agrees with that statement in her study on no sweat labels. In a subsequent study Roberts (1996) stresses the importance of variables such as relevant attitudes and behavior, personality characteristics and so on, that can identify the possible ethical consumer. Following the recommendations of Roberts (1996), Vitell et al. (2001) also studied the possibility of separating out ethical consumers based on their philosophical evaluations of ethical situations. They found that consumers are more guided by principles (deontology) than by consequences (teleology) when making ethical decisions. Shaw and Clarke (1999) highlighted, through qualitative research, normative and broader environmental factors to be decisive for ethical beliefs and thus ethical decision making. Because of the rather blurred identity of the ethical consumer based on demographics, one indeed has to look beyond these kinds of variables. In this study ethical behavior is also linked to personal values.

Research method

We studied the employees and staff of the Ghent University in Belgium. A web-site was created to administrate a full-profile conjoint questionnaire. Several beneficial implications justify the use of the Internet (Orme and King, 1998). The use of Internet significantly reduces the costs of the survey, respondents can be reached more quickly and the response rate is higher. Furthermore, social desirability is reduced because respondents feel less personally addressed.

An E-mail was sent to 4664 staff members who were known to have an e-mail address. 891 questionnaires were completed, of which 779 were useful. The remaining 550 staff members without an Internet account were approached by mail. 62 staff members responded of which 55 questionnaires were useful. After carrying out the conjoint analysis which is described below, it seemed that another 26 respondents gave inconsistent answers. In short, the sample is composed of 808 respondents. To stimulate participation, 25 coupons were divided among the respondents. Table I shows the composition of the sample.

Due to the specific university context, younger and better educated respondents are over represented. In order to verify to what extent this may affect the robustness of our basic results and conclusions, in addition a subsample of the respondents was studied, i.e. the administrative and technical staff of the University, of which the composition is much more representative for the total population, regarding education and age.

Table I. Description of the sample

Characteristic		Total Sample Percentages (N=808)	Administrative and technical staff Percentages (N=)
Gender	Male	46.0	34
	Female	54.0	66
Age	24 to 30	57.7	33
	31 to 44	27.0	36
	older than 45	15.3	31
Education	High school	15.9	39
	Higher education	84.1	61

A conjoint analysis was used to measure the consumers' preferences facing a coffee buying situation in a supermarket. In this type of analysis, consumers are asked to indicate their preference for products with varying characteristics. Conjoint analysis can be used to partly overcome the attitude-behavior gap in a quantitative way. It is a technique by means of which product preferences can be decomposed into importance weights. In this way, the importance of different attributes or criteria in the consumer's evaluation of the product can be studied (Green et al, 1978). By simulating real situations in the marketplace, conjoint analysis concerns day-to-day decisions of consumers and has a reasonable ability for predicting consumers' behavior towards new stimuli. Consumers show their preferences by making trade-offs between different attributes of a product (Green and Srinivasan, 1978; Carroll and Green, 1995; Green et al., 2001).

Based on an exploratory group discussion with 12 persons, the relevant coffee attributes were selected as well as the appropriate levels within those attributes. These were:

- *Brand: Manufacturer brand and Private label.* "Douwe Egberts" has a market share in Belgium of about 50%. Hereafter, it will be referred to as "Manufacturer brand". Private labels account for another 25% to 30%. The remaining part is smaller coffee brands.
- *Blending: 100% arabica beans and a blend of arabica and robusta beans.* A coffee is considered of high quality when the blending is 100% pure arabica beans.
- *Flavor: dessert, decaffeine and mocha.* Coffee roasters focus on mainly 3 flavors: dessert, decaffeine and mocha to segment the market.

- *Package: “warm” and “cold”*. Consumers can be appealed to a type of coffee because of the exotic or warm appearance of the package. Therefore a “cold” and the “warm” level of packaging was used. An exploratory test was conducted to determine what people perceived as a “cold” or a “warm” package. The two kinds of packages were visualized in the questionnaire.
- *The presence or absence of a fair-trade label* was our fifth attribute.

Based on the attributes and their levels, a total of 48 descriptions of coffee types are possible ($2 \times 2 \times 3 \times 2 \times 2$). However, it is impossible for respondents to indicate a preference for 48 product types. Therefore, conjoint analysis uses a fractional design, i.e., a systematic selection of a small number out of the full set of product profiles, while maintaining the coincidence of the uncorrelated levels of different attributes appearing together. This design assures that an estimate of the importance of one attribute is unaffected by the estimate of other attributes. In this study, a fractional (orthogonal) design of 8 product profiles was used (see Table II).

To measure the relative importance of all attributes in their purchasing decision of coffee, the respondents were asked to express their preference by filling in their willingness-to-pay for the eight full profiles of the fractional design. A coffee with dessert flavor, a “warm” package, a blending of arabica and robusta beans, without a fair-trade label and of the manufacturer brand, was set at a price of Euro 1.87 and given as an example for guidance. Starting from this reference price, respondents were asked to indicate the price they were willing to pay for each type of coffee. Hence, the respondents were asked to put a price on each type of coffee to express their preference. By mentioning the fair-trade label in the conjoint task, all respondents start from the same point, that is, one can assume that all respondents are equally informed and that the fairly traded coffee is perceptible for everybody. The conjoint analysis method results in individual part-worth utilities of which the relative importance of each attribute can be derived.

Table II: Coffee type profiles studied

	Label	Brand	Blending	Package	Flavor
Profile 1	Fair-trade	Private label	100% arabica	“warm”	Dessert
Profile 2	No fair-trade	Manufacturer brand	Arabica/robusta	“cold”	Dessert
Profile 3	No fair-trade	Manufacturer brand	100% arabica	“warm”	Dessert
Profile 4	Fair-trade	Manufacturer brand	Arabica/robusta	“warm”	Decaf
Profile 5	Fair-trade	Manufacturer brand	100% arabica	“cold”	Mocha
Profile 6	No fair-trade	Private label	Arabica/robusta	“warm”	Mocha
Profile 7	Fair-trade	Private label	Arabica/robusta	“cold”	Dessert
Profile 8	No fair-trade	Private label	100% arabica	“cold”	Decaf

Apart from demographic variables (gender, age and education), respondents were also asked about their personal values. It is generally perceived that personal values indicate modes of behavior. The Rokeach (1973) value scale is often used to measure personal values. The survey contains a set of eighteen

terminal values which relate to “end states of existence”, and another set composed of 18 values which relate to “modes of behavior” or instrumental values. A major critique on this value scale is the variability among interpretation of the values. If two people interpret a certain value differently, they will probably rank these two interpretations differently, even if the two people have the same value system (Gibbins and Walker, 1993). Some studies have tried to define “ethical” values within the Rokeach values. Sikula and Costa (1994) examined *Equality, freedom, honest and responsible*, based on the four components of “moral maximization”, in their study of different ethical beliefs between men and women. Fritzsche (1995) tested the values *responsible, honest and broadminded* on their importance in ethical decision making. Except for a slight significance of the variable *honest*, the results did not meet the assumptions. Using the MILOV scale, which is derived from the Rokeach scale, Nonis and Swift (2001), could distinguish differences in ethical decision making among students. In this study, the full Rokeach scale was used.

The 18 terminal and 18 instrumental values are considered the important principles guiding one’s behavior throughout life (Rokeach, 1973). Originally, these values were expected to be rank ordered. In our study, the respondents are asked to rate all items separately on a 9 point Likert-scale. In this way, non-parametric restrictions can be overcome. Literature has shown that the two methods show similar results. Finegan (1994) extended the use of the Rokeach instrument in her study of psychology majors. She asked them not only to rank order the values, but also to rate the importance of the values on a 7-point Likert scale, which minimized some of the problems, associated with rank ordering. Munson and McIntyre (1979) investigated alternative elicitation methods for the measurement of personal values in their study of cultural differences; they concluded that the Likert rating approach is an appropriate replacement for the original rank ordering procedure recommended by Rokeach (1973). Moreover, Munson and Posner (1980) assert that the information about the intensity of guidance in an individual’s life is more precise using a Likert type rating scale. Also, rating goes faster and is therefore more convenient for the respondent (Fritzsche, 1995).

Results

Relative importance of the fair-trade attribute for consumers when buying coffee.

A conjoint analysis was carried out for the whole sample. By means of the part-worth utilities, conjoint analysis determines which combinations of the levels of attributes are most preferred by each respondent. The relative importance of each attribute in the purchase decision is also assessed. This is done by taking the utility range of the considered attribute and dividing it by the sum of the utility ranges of all attributes. Table III shows the averaged relative importance of the attributes of the whole sample and the sub-sample of the administrative and technical staff.

Table III. Averaged relative importance of coffee attributes

Attributes	Relative Importance (in %)	
	Total sample	Administrative and technical Staff
<i>Label</i>	25	25
<i>Brand</i>	28	28
<i>Blending</i>	12	12
<i>Package</i>	9	9
<i>Flavor</i>	25	26

As could be expected, the brand attribute has the highest relative importance for the total sample. There is no difference between the importance of the fair-trade label and flavor. Both come in second place in the purchasing decisions of the consumers. *Apparently, the label is judged as important as flavor and almost as important as the brand.* Although the strategy now used to increase the demand for coffee is the introduction of all sorts of specialty coffees (Ponte, 2001), the negative utility for a mocha flavor could indicate that consumers are not yet ‘educated’ as far as specialty coffees are concerned. Package and blending were of minor relative importance. These conclusions also hold for the subsample of the administrative and technical staff, of which the composition in terms of education and age is more representative of the total population. The relative importance of the different coffee attributes is barely different from that of the total sample. Hence, the overrepresentation of younger and better educated respondents in the sample does not seem to cause any particular bias in the results.

At the same time, one has to tone down the impact of the three dominant attributes brand, label and flavor. Coffee is, as opposed to a washing machine for example, a low involvement good. This implies a general indifference to any attribute. Buying a specific type of coffee is often a matter of habit. This was also revealed in the conjoint analysis by the importance of the constant in the coffee preferences, i.e. the part of utility of coffee not explained by the five attributes, which amounted for all respondents to 72% of total utility.

Willingness-to-pay for a fair-trade label

In order to express their preferences for a given type of coffee, respondents were asked about their willingness-to-pay, in comparison with the example of 1.87 Euro. Since the orthogonal design is representative for all combinations of attribute levels, it can be concluded that the four profiles with a label only differ from the four profiles without a label in terms of the label itself. Therefore, the willingness-to-pay for a fair-trade label is the difference between the average price indicated for fairly traded coffees and the average price indicated for coffees without a label. The average willingness-to-pay for the whole sample was € 0.19, i.e. a mark-up of 10% above the reference price. Table IV shows the share of respondents who are willing to pay a price premium 10%, 20% and 27% for fairly traded coffee.

Table IV. Willingness-to-pay for a fair-trade label

Price premium (%)	Non-buyers	Buyers
10% (=0,19 Euro) (sample average)	0.65	0.35
20% (=0,37 Euro)	0.83	0.17
27% (=0,50 Euro) (actual premium)	0.90	0.10

The share of buyers (i.e. the share of the respondents who would buy fair-trade coffee given a certain price premium) and non-buyers should be interpreted as a market penetration potential but not as a market share, since the amount of coffee each of the groups buy is unknown. Furthermore, this penetration potential is only valid under the assumptions of correct information and equal availability.

It is interesting to compare these findings with reality. There are four types of coffee present on the Belgian market that conform to the description of the questionnaire and that have a fairly traded counterpart. Table V shows their prices and the price premium of their fair-trade labeled equivalent (in percentage).

Table V. Comparison of coffee-prices with prices of their fairly traded counterpart.

	No fair-trade (Euro))	Fair-trade (Euro))	Price premium (%)
Brand 1	1.46	2.21	51%
Brand 2	1.46	2.03	39%
Brand 3	1.88	2.36	25%
Brand 4	1.59	2.11	33%
Average	1.60	2.18	36%

Source : ACNielsen

According to the results in Table IV, a price premium of 36% would imply a market penetration of less than 10%. The actual price premium of fair-trade coffee amounts to 27% when all types of coffees are taken into account (ACNielsen, 2002). From our survey, this would represent a market potential of about 10%. It is clear that most people do not want to pay the actual price premium for a fair-trade label.

Segmentation of the coffee market

A conjoint analysis has also been carried out for each respondent separately. Since each respondent finds different attributes important when purchasing coffee, respondents can be grouped based on their behavioral intention. Using a K-means cluster analysis on the levels of relative importance they attach to each attribute, the respondents are assigned to different groups. To start with a good partition, the number of clusters is first determined using the hierarchical Ward-method. Four clusters appeared to be optimal. A drawback of hierarchical methods is that an individual can never be removed from the cluster it is assigned to, which may result in a sub-optimal clustering. Partitioning methods such as k-means cluster analysis attempt to avoid this problem. Table VI shows the properties of the final cluster centers.

Table VI. K-means with 4 clusters

	Clusters			
	1	2	3	4
Relative importance of the fair-trade label	69.18	31.69	11.11	10.06
Relative importance of the brand	9.97	20.13	16.45	60.22
Relative importance of the blending	5.27	16.44	11.83	7.37
Relative importance of the package	4.14	10.53	11.13	7.21
Relative importance of the flavor	11.44	21.20	49.48	15.14
Respondents as percentage of the total sample (N = 808)	11%	40%	24%	25%

The respondents in the first cluster expressed a high preference for a fair-trade label. The relative importance of this attribute is 69.18%, throwing the other attributes into the shade. Hence, this cluster is called the *fair-trade lovers*. Cluster 2 is characterized by the relative indifference between the attributes. The fair-trade label comes out as the most important attribute but not as prominent as in cluster 1. We call this cluster the *fair trade likers*. The *flavor lovers* determine cluster 3. They obviously prefer the flavor in their coffee and make no distinction between the other attributes. Finally, the salient characteristic of cluster 4 is the relative importance respondents lay on the brand of their purchased coffee, i.e. they are the *brand lovers* : their main preference goes to the brand they are used to buy.

Table VI also indicates the relative size of the clusters in the sample. 50% of the respondents do take fair-trade into account when purchasing coffee, of which 11% thinks fair-trade is all-important. This is about the same proportion of the sample that is willing to pay a high price premium. This means that the fair-trade niche could be much larger than it is at present (a 1% market share). On the other hand, the other 50% of the sample have apparently other priorities than fair-trade when they buy coffee.

Characteristics of the fair-trade consumers.

Since the clusters are a segmentation of the market based on purchase behavior, it is useful to profile them using demographic factors and personal values. As described above, the significance of demographic factors in ethical decisions is not clear except for income, which is unanimously considered as being not relevant. Therefore, in this study only age, gender and education are looked at. The age variable is classified into 3 categories: 18 to 30, 31 to 44 and >45. Two levels of education were considered : high school and higher education.

Table VII. Cluster demographics.

	Total sample	Fair-trade lovers	Fair trade likers	Flavor lovers	Brand lovers
Sex (.016)					
Male	45.9%	51.1%	43.6%	54.1%	39.5%
Female	54.1%	48.9%	56.4%	45.9%	60.5%
Education (.037)					
High school	16.0%	7.8%	15.7%	21.1%	15.1%
Higher education	84.0%	92.2%	84.3%	78.9%	84.9%
Age (.000)					
24 to 30	57.5%	54.4%	56.7%	48.5%	68.8%
31 to 44	27.0%	36.7%	26.3%	25.3%	25.4%
>45	15.5%	8.9%	16.9%	26.3%	5.9%

Table VII gives a description of each cluster in terms of age, education and sex. For every independent variable, Pearson's Chi-square is given between brackets. A chi-square of less than .05 points at a significant difference between clusters. This study confirms the findings (Hines and Ames, 2000; Anderson and Cunningham, 1972; Vitell et al., 2001) as far as age and education are concerned. The significant difference of all investigated variables could be due to the fact that fair-trade, in comparison with social responsibility and environmental friendliness, is a relatively new concept. The brand lovers are composed of significantly more women and more young people. The reason for this could be that women still do more shopping than men do and as a results they could be more brand aware. The current importance of brands could outweigh the ethical message for this group of consumers (Carrigan and Attalla, 2001). People in the 31 to 44 age group are relatively more present in the fair-trade lovers cluster. This is in line with the profile that fair-trade organizations see as their target group. Finally, the flavor lovers are older than the members of the other clusters.

Table VIII. Relevant Rokeach items and factor loadings

	Correlation with				
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Obedient (i.e., dutiful, respectful)	0.80				
Polite (i.e., courteous, well-mannered)	0.78				
Clean (i.e., neat, tidy)	0.70				
Self-controlled (i.e., restrained, self-disciplined)	0.60				
Intellectual (i.e., intelligent, reflective)		0.81			
Logical (i.e., consistent, rational)		0.75			
Capable (i.e., competent, effective)		0.63			
Independent (i.e., self-reliant, self-sufficient)		0.58			
Forgiving (i.e., willing to pardon others)			0.71		
Helpful (i.e., working for the welfare of others)			0.71		
Honest (i.e., sincere, truthful)			0.67		
Broad-minded (i.e., open minded)			0.57		
A world at peace (i.e., free of war and conflict)				0.81	
A world of beauty (i.e., beauty of nature and the arts)				0.74	
Equality (i.e., brotherhood, equal opportunity for all)				0.70	
An exciting life (i.e., a stimulating, active life)					0.76
Pleasure (i.e., an enjoyable leisurely life)					0.74
Cheerful (i.e., light-hearted, joyful)					0.67
Cronbach's alfa	(0.76)	(0.68)	(0.64)	(0.69)	(0.62)
	civic spirit	competence	sincere & social	idealistic	personal gratification

Table VIII lists the scale items and the factor loadings, together with the respective Cronbach's Alfa per factor. The loadings are only reported if the item loaded explicitly on a single factor and the loading was at least 0.5. Cronbach's Alfa is a coefficient of reliability. It measures how well a set of items (or variables) measures a single unidimensional latent construct and it should be higher than 0.60. Only 5 of the 18 items loading exclusively on one factor are terminal values. This is in line with the current trend to focus on values as modes of behavior rather than as end states (Meglino and Ravlin, 1998). Also Finegan (1994) and Roozen et al. (2001) acknowledge the better predictive power of instrumental values to explain ethical behavior. Consistent with the literature (Vinson et al., 1977; Crosby et al., 1990) on the

underlying dimensions of the Rokeach values, we call factor 1 the *civic spirit* factor, factor 2 the *competence* factor, factor 3 the *sincere & social* factor, factor 4 the *idealistic* factor and factor 5 the *personal gratification* factor.

As the Cronbach's alfa for every factor exceeds 0.60, summated scales can be used (the scores are summated over all scale items). An ANOVA for every factor is conducted to check for significant differences between the four identified clusters. According to the Levene-statistic the null-hypothesis of equal variances cannot be rejected. The Bonferroni post-hoc test is done as a multiple comparison procedure to determine which means are significantly different from each other. Table IX provides the differences in means between the clusters for each factor.

We notice, first, that two of the underlying factors, namely the competence factor and the social&sincere factor, are not significantly different across the clusters. Second, fair-trade lovers have less civic spirit than flavor lovers and brand lovers, in the specific meaning it has here. The composing items of *the civic spirit* factor are obedience, politeness, cleanness and self-control. People who respect these values are considered by society to be good citizens in the sense that they cause no harassment to other citizens, but it does not go beyond that. Third, *fair-trade lovers* and *fair trade likers* are significantly more idealistic than the other two clusters. Roozen et al. (2001) also found idealism as a determining factor for ethical behavior. The relation between fair-trade labels and striving for a better world is evident. Finally, the *brand lovers* are significantly more into personal gratification than any other respondent. This also seems logical: brands satisfy personal, but no fundamental needs. Personal values are clearly distinct between the four clusters of customers on the coffee market. Overall, the four clusters can be described as follows.

Table IX. Bonferroni post-hoc tests for the five underlying factors

Civic spirit	Fair-trade lovers	Fair trade likers	Flavor lovers	Brand lovers
mean	3.0222	3.3464	3.6438	3.7841
Fair-trade lovers	0	-.3242	-.6216*	-.7619*
Fair trade likers	.3242	0	-.2974	-.4378*
Flavor lovers	.6216*	.2974	0	-.1404
Brand lovers	.7619*	.4378*	.1404	0

competence	Fair-trade lovers	Fair trade likers	Flavor lovers	Brand lovers
mean	4.5972	4.4483	4.5567	4.5012
Fair-trade lovers	0	.1489	4. E-02	1. E-01
Fair trade likers	-.1489	0	-.1084	-.0529
Flavor lovers	-.0405	.1084	0	6. E-02
Brand lovers	-.0960	5. E-02	-.0555	0

Sincere&social	Fair-trade lovers	Fair trade likers	Flavor lovers	Brand lovers
mean	4.9139	4.7923	4.6997	4.7220
Fair-trade lovers	0	.1216	.2141	.1919
Fair trade likers	-.1216	0	9. E-02	7. E-02
Flavor lovers	-.2141	-.0926	0	-.0222
Brand lovers	-.1919	-.0704	2. E-02	0

idealistic	Fair-trade lovers	Fair trade likers	Flavor lovers	Brand lovers
mean	4.5296	4.4734	4.0590	3.9984
Fair-trade lovers	0	6. E-02	.4706*	.5313*
Fair trade likers	-.0563	0	.4143*	.4750*
Flavor lovers	-.4706*	-.4143*	0	6. E-02
Brand lovers	-.5313*	-.4750*	-.0607	0

Pers. gratification	Fair-trade lovers	Fair trade likers	Flavor lovers	Brand lovers
mean	3.4704	3.5946	3.5859	3.9561
Fair-trade lovers	0	-.1242	-.1155	-.4857*
Fair trade likers	.1242	0	9. E-03	-.3615*
Flavor lovers	.1155	-.0087	0	-.3702*
Brand lovers	.4857*	.3615*	.3702*	0

* The mean difference is significant at the .05 level

Fair-trade lovers account for 11% of the sample. For this group a fair-trade label on coffee is of the highest importance and it represents the dominating attribute when buying coffee. They are between 31 and 44 years old and have received higher education than the other clusters. They are, together with the flavor lovers, relatively more male than the other two clusters. This cluster tends to be more idealistic, but has less civic spirit.

The fair trade likers form the largest group with 40% of the sample. They tend to choose a fair-trade label on coffee but also have the highest preference for blending among the clusters and the second highest preference for any other attribute. Demographics are not really different from other clusters and this group tends to adhere to the same values as the fair-trade lovers.

The flavor lovers consist of one fourth of the total sample (24%). There are relatively more men in this cluster. They are older than the other clusters and lower educated although this could be intrinsic to the fact of being older. They have more civic spirit than the two former clusters and are less idealistic.

The brand lovers account for 25% of the sample. Women are more likely to be a brand lover. Their education profile is similar as the one of the fair trade likers but the brand lovers are significantly younger than any other group. Considering personal gratification as a way of life makes the difference between them and the other clusters.

Conclusions

In this paper, we investigated to what extent consumers take a fair-trade label into account when purchasing coffee. As an indication of the relevance of ethical issues in business, the literature has shown that consumers expect companies to behave socially responsible and that they are concerned about the way a product is produced. A substantial number of surveys show that consumers value the ethical aspect in a product and that there is a willingness-to-pay for ethical products. Yet, consumers' behavior in the marketplace is apparently not consistent with their reported attitude towards products with an ethical dimension. In this study, we tried to go further in the explanation of the attitude/behavior gap by capturing the purchase intention for fair-trade coffee. As a fast-moving, low involvement good, this product has several features to which a consumer pays attention: price, brand loyalty, convenience, blending, package, flavor and maybe the presence of a fair-trade label. In order to take the attitude/behavior gap into account, we determine the value of a fair-trade label, and hence the importance of ethics, by including simultaneously all the relevant dimensions of coffee buying intentions.

According to the survey, the brand is the most important attribute of coffee, closely followed by flavor and fair-trade label in second. The willingness-to-pay for a fair-trade label on coffee of the respondents indicated that about 10% of the sample want to pay the current price premium in Belgium of 27%.

Clusters based on differences in preference were defined to estimate market opportunities for fairly traded coffee and to profile the consumers. Profiling was done by means of the demographic features, age, income and education level, as well as the underlying factors of the Rokeach personal values scale. Four clusters were identified that were predominantly characterized by the values of the respondents. The fair-trade lovers account for 11% of the sample and are aged between 31 and 45 years. They are more idealistic and have less civic spirit compared to the rest of the sample. The fair trade likers represent the biggest group. The flavor lovers and the brand lovers both account for one-fourth of the total sample and are less idealistic and have more civic spirit. In addition, brand lovers are more likely to be women.

Of these clusters, the fair-trade lovers probably constitute the group that is prepared to pay the actual high price premium and represents about 10% of the sample. The fair-trade lovers probably already buy the coffee but only once in a while. The flavor lovers and the brand lovers, who account for 50% care less about a fair-trade label on their coffee. By means of the specific technique of conjoint analysis, we already closed the attitude/behavior gap substantially. Yet, an important difference with reality remains, due to two reasons. Firstly, the 10% fair trade lovers cannot be considered as a market share, because it is not known how much coffee they buy relative to the rest of the population. Nevertheless, the gap with the less than one percent market share of fair trade coffee in Belgium is substantial. This 'behavioral intention – behavior' gap may be due to inefficient distribution of fair trade coffee, lack of visibility in the shops and/or inadequate promotion. Secondly, the results are based on the assumption of extensive, equal and correct information for all respondents and availability of fair-trade coffee in the same way as other known brands. In reality, this is certainly not the case.

The respondent-rate of the mailing was only half that of the on-line survey. This adds to the explanation why higher educated respondents and respondents below 45 years tended to be over-represented in our sample. But all in all, the sample was quite representative in a number of ways and our basic results are unaffected by the specific composition of the sample. Despite this encouraging result, there remains a need for replicating this study in even more representative groups and in an international context. Furthermore, there are at least two directions in which this research could be expanded. First of all, fair trade labels are increasingly used on other types of products, such as bananas, honey, chocolate and clothing. To what extent is the 'fair trade' attribute of different importance for the buying decision in these different product categories? Is there a different price premium that consumers want to pay, or different market segments that are attracted by the fair trade argument in other product categories? Another direction for future research is the following one. There is an increasing competition on the 'good cause label' market. An increasing number of products carry 'green', 'bio', 'social' or 'fair trade' labels. Idealistic consumers are increasingly faced with the choice between these labels. Could it be that the 10% very idealistic consumers have to divide their attention between all these 'good cause label' products, resulting in poor market shares for some of them? Or are some of these labels, like 'green' or 'bio' simply more attractive because they appeal more to the immediate personal well-being than social or fair trade products? Future research should focus upon these issues'

Although the fair-trade lovers are a considerable niche, the size of the fair-trade likers segment indicates the full market potential of fair-trade coffee. Fair-trade lovers and likers cover 50% of the consumers. Hence this –very large- group could probably be convinced to buy fair-trade coffee if better informed and if the right marketing efforts are pursued. Future campaigns to promote fair trade products should therefore focus on the fair-trade likers. They are positively inclined towards ethical labels and some of them could be convinced to pay the fair trade price premium. Campaigns should focus upon their 'idealistic' nature that distinguishes them from flavor and brand lovers.

Our findings show that ethical consumer decisions are equally determined by personal values as well as by socio-demographic characteristics. Marketing strategies should take this into account and be better adapted to values as idealism, personal gratification or civic spirit to convince this unexploited fair-trade market.

Acknowledgment

The authors gratefully acknowledge the financial support of the University Development Cooperation program of the Flemish Interuniversity Council, which made this research possible

References

- ACNielsen : 2002, 'Data on the Belgian Coffee Market (1999-2001)', Unpublished technical report and data, ACNielsen, Brussels.
- Anderson, W. T. and W. H. Cunningham: 1972, 'The Socially Conscious Consumer', *Journal of Marketing* **36**, 23-31.
- Auger, P., T. M. Devinney and J. J. Louviere: 2000, 'Wither Ethical Consumerism: Do Consumers Value Ethical Attributes?', Unpublished working paper: Australian Graduate School of Management, University of New South Wales.
- Bird, K. and D. R. Hughes: 1997, 'Ethical Consumerism: The Case Of "Fairly-Traded" Coffee', *Business ethics: a European review* **6** (3), 159-167.
- Burke, L. and J. M. Logsdon: 1996, 'How Corporate Social Responsibility Pays Off', *Long Range Planning* **29**, 441-502.
- Carrigan, M. and A. Attalla: 2001, 'The myth of the ethical consumer – do ethics matter in purchase behaviour?', *Journal of Consumer Marketing* **18** (7), 560-577.
- Carroll, J. D. and P. E. Green: 1995, 'Psychometric Methods in Marketing Research: Part I, Conjoint Analysis', *Journal of Marketing Research* **32**, 385-391.
- Cobb-Walgreen, C. J. and C. A. Ruble: 1995, 'Brand Equity, Brand Preference, and Purchase intent', *Journal of Advertising* **24** (3), 25-41.
- Cowe, R. and S. Williams: 2000, 'Who are the ethical consumers?', booklet for the Co-operative Bank.
- Crane, A.:2001, 'Unpacking the ethical product', *Journal of Business Ethics* **30** (4), 361-373.
- CRC-Consommation: 1998, 'Commerce éthique: les consommateurs solidaires', étude.
- Creyer, E.: 1997, 'The influence of firm behavior on purchase intention: do consumers really care about business ethics?', *The Journal of Consumer Marketing* **14** (6), 421-432.
- Crosby, L.A., M.J. Bitner and J. D. Gill: 1990, 'Organizational Structure of Values', *Journal of Business Research*, **20**, 123-134.
- Dickson, M. A.: 2001, 'Utility of no sweat labels for apparel consumers: Profiling label users and predicting their purchases', *The Journal of Consumer Affairs* **35** (1), 96-119.
- Finegan, J.: 1994, 'The impact of personal values on judgments of ethical behaviour in the workplace', *Journal of Business Ethics* **13** (9), 747-755.
- Fritzsche, D. J.: 1995, 'Personal Values: Potential Keys to Ethical Decision Making', *Journal of Business Ethics* **14**, 909-922.
- Gaski, J.F.: 1999, 'Does marketing ethics really have anything to say? – A critical inventory of the literature', *Journal of Business Ethics* **18** (3), 315-334.
- Gibbins, K. and I. Walker: 1993, 'Multiple interpretations of the Rokeach value survey', *Journal of Social Psychology* **133** (6), 797-804.

- Green, P. E. and V. Srinivasan: 1978, 'Conjoint Analysis in Consumer Research: Issues and Outlook', *Journal of Consumer Research* **5**, 103-123.
- Green, P. E., V. R. Rao and W. Desarbo: 1978, 'Incorporating Group-level Similarity Judgements in Conjoint Analysis', *Journal of Consumer Research*, 187-193.
- Green, P.E., A. M. Krieger and Y. Wind: 2001, 'Thirty Years of conjoint Analysis: Reflections and Prospects', *Interfaces* **31** (3), 56-73.
- Hines, C. and A. Ames: 2000, 'Ethical Consumerism', a Research Study Conducted for the Co-operative Bank by MORI, MORI, London.
- MacGillivray, A.: 2000, 'The Fair Share: the growing market share of Green and ethical products', New Economics Foundation.
- Maignan, I. and O. C. Ferrell: 2001, 'Corporate citizenship as a marketing instrument – Concepts, evidence and research directions', *European Journal of Marketing* **35** (3/4), 457-484.
- Meglino, B. M. and E. C. Ravlin: 1998, 'Individual values in organizations: Concepts, controversies and research', *Journal of Management* **24** (3), 351-390.
- MORI: 2000, 'European Attitudes towards Corporate Social Responsibility', Research for CSR Europe, MORI, London.
- Munson, J. M. and B. Z. Posner: 1980, 'The factorial Validity of a Modified Rokeach Value Survey for Four Diverse Samples', *Educational and Psychological Measurement* **40**, 1073-1079.
- Munson, J. M. and S. H. McIntyre: 1979 'Developing Practical Procedures for the Measurement of Personal Values in cross-cultural Marketing', *Journal of Marketing Research* **16**, 48-52.
- Nonis, S. and C. Swift: 2001 'Personal Value Profiles and Ethical Business Decisions', *Journal of Education for Business* **76** (5), 251-256.
- Norberg, H. M.: 2000, 'Use of Collective Trademarks in Consumers' Choice of Foods – Preliminary Results', *Okonomisk Fiskeriforskning* **10** (2), 144-161.
- Orme, B. K. and W. C. King: 1998, 'Conducting Full-Profile Conjoint Analysis over the Internet', Sawtooth Software Research Paper Series.
- Roberts, J. A.: 1995, 'Profiling Levels of Socially Responsible Consumer Behavior: A Cluster Analytic Approach and its Implications for Marketing', *Journal of Marketing*, fall 1995, 97-117.
- Roberts, J. A.: 1996, 'Will the Real Socially Responsible Consumer Please Step Forward?', *Business Horizons* **39** (1), 79-83.
- Robin, D. P. and R. E. Reidenbach: 1987, 'Social Responsibility, Ethics, and Marketing Strategy: Closing the Gap Between Concept and Application', *Journal of Marketing* **51**, 44-58.
- Rokeach, M.: 1973, *The Nature of Human Values*, (The Free Press, New York).
- Roozen, I., P. De Pelsmacker and F. Bostyn: 2001, 'The Ethical Dimensions of Decision Processes of Employees', *Journal of Business Ethics* **33**, 87-99.
- Shaw, D. and I. Clarke: 1999, 'Belief Formation in ethical consumer groups: an exploratory study', *Marketing Intelligence & Planning* **17** (2), 109-119.
- Sikula, A. Sr. And A. D. Costa: 1994, 'Are Women More Ethical than Men?', *Journal of Business Ethics* **13**, 859-871.
- Smith G.: 1990, 'How green is my valley', *Marketing and Research Today* **18**, 76-82.

- Sriram, V. and A. M. Forman: 1993, 'The Relative Importance of Products' Environmental Attributes: A Cross-cultural Comparison', *International Marketing Review* **10** (3), 51-70.
- Strong, C.: 1996, 'Features contributing to the growth of ethical consumerism – a preliminary investigation', *Marketing Intelligence & Planning* **14** (5), 5-13.
- Strong, C.: 1997, 'The problems of translating fair trade principles into consumer purchase behaviour', *Marketing Intelligence & Planning* **15** (1), 32-37.
- Tallontire, A., E. Rentsendorj and M. Blowfield: 2001, 'Ethical Consumers and Ethical Trade: A Review of Current Literature', Policy Series 12, Natural Resources Institute.
- The Roper Organization Inc.: 1990, 'The Environment: Public Attitudes And Individual Behavior', Commissioned by S.C. Johnson & Son, Inc..
- Tsalikis, J. and M. Ortiz-Buonafina: 1990, 'Ethical Beliefs' Differences of Males and Females', *Journal of Business Ethics* **9**, 509-517.
- Vinson, D.E, J.M. Munsoon and M. Nakanishi: 1977, 'An Investigation of the Rokeach Value Survey for Consumer Research Applications', in W.E. Perrault (ed.), *Advances in Consumer Research*, Volume 4 (Association for Consumer Research, Provo, UT), pp. 247-252.
- Vitell, S., J. Singhapakdi and J. Thomas: 2001, 'Consumer ethics: an application and empirical testing of the Hunt-Vitell theory of ethics', *Journal of Consumer Marketing* **18** (2), 153-178.
- Vowles, J. C.: 2000, 'Fettered Activism? A Discussion of Green Consumerism in the UK', Assessed Essay, Environmental Change Institute, University of Oxford.
- Whysall, P.: 2000, 'Stakeholder Mismanagement in retailing: a British perspective', *Journal of Business Ethics* **23**, 19-28.



WORKING PAPER SERIES

4

- 98/59 **J. ALBRECHT**, Environmental consumer subsidies and potential reductions of CO₂ emissions, October 1998, 28 p.
- 98/60 **K. SCHOORS**, A payment system failure and its consequences for interrepublican trade in the former Soviet Union, December 1998, 31 p. (forthcoming in *Economic Systems*, 2003).
- 98/61 **M. DE LOOF**, Intragroup relations and the determinants of corporate liquid reserves : Belgian evidence, December 1998, 29 p. (published in *European Financial Management*, 2000).
- 98/62 **P. VAN KENHOVE, W. VAN WATERSCHOOT, K. DE WULF**, The impact of task definition on store choice and store-attribute saliences, December 1998, 16 p. (published in *Journal of Retailing*, 1999).
- 99/63 **P. GEMMEL, F. BOURGONJON**, Divergent perceptions of TQM implementation in hospitals, January 1999, 25 p. (forthcoming in *Journal of Management in Medicine*, 2000)
- 99/64 **K. SCHOORS**, The credit squeeze during Russia's early transition. A bank-based view, January 1999, 26 p. (published in *Economics of Transition*, 2001).
- 99/65 **G. EVERAERT**, Shifts in balanced growth and public capital - an empirical analysis for Belgium, March 1999, 24 p.
- 99/66 **M. DE LOOF, M. JEGERS**, Trade Credit, Corporate Groups, and the Financing of Belgian Firms, March 1999, 31 p. (published in *Journal of Business Finance and Accounting*, 1999).
- 99/67 **M. DE LOOF, I. VERSCHUEREN**, Are leases and debt substitutes ? Evidence from Belgian firms, March 1999, 11 p. (published in *Financial Management*, 1999).
- 99/68 **H. OOGHE, A. DEHAENE**, De sociale balans in België : voorstel van analysemethode en toepassing op het boekjaar 1996, April 1999, 28 p. (gepubliceerd in *Accountancy en Bedrijfskunde Kwartaalschrift*, 1999).
- 99/69 **J. BOUCKAERT**, Monopolistic competition with a mail order business, May 1999, 9 p. (published in *Economics Letters*, 2000).
- 99/70 **R. MOENAERT, F. CAELDRIES, A. LIEVENS, E. WOUTERS**, Communication flows in international product innovation teams, June 1999, p. (published in *Journal of Product Innovation Management*, 2000).
- 99/71 **G. EVERAERT**, Infrequent large shocks to unemployment. New evidence on alternative persistence perspectives, July 1999, 28 p. (published in *LABOUR: Review of Labour Economics and Industrial Relations*, 2001).
- 99/72 **L. POZZI**, Tax discounting and direct crowding-out in Belgium : implications for fiscal policy, August 1999, 21 p.
- 99/73 **I. VERSCHUEREN, M. DE LOOF**, Intragroup debt, intragroup guaranties and the capital structure of Belgian firms, August 1999, 26 p.
- 99/74 **A. BOSMANS, P. VAN KENHOVE, P. VLERICK, H. HENDRICKX**, Automatic Activation of the Self in a Persuasion Context, September 1999, 19 p. (published in *Advances in Consumer Research*, 2000).
- 99/75 **I. DE BEELDE, S. COOREMAN, H. LEYDENS**, Expectations of users of financial information with regard to the tasks carried out by auditors, October 1999, 17 p.
- 99/76 **J. CHRISTIAENS**, Converging new public management reforms and diverging accounting practices in Belgian local governments, October 1999, 26 p. (published in *Financial Accountability & Management*, 2001)
- 99/77 **V. WEETS**, Who will be the new auditor ?, October 1999, 22 p.
- 99/78 **M. DEBRUYNE, R. MOENAERT, A. GRIFFIN, S. HART, E.J. HULTINK, H. ROBBEN**, The impact of new product launch strategies on competitive reaction in industrial markets, November 1999, 25 p.
- 99/79 **H. OOGHE, H. CLAUS, N. SIERENS, J. CAMERLYNCK**, International comparison of failure prediction models from different countries: an empirical analysis, December 1999, 33 p.



FACULTEIT ECONOMIE EN BEDRIJFSKUNDE
HOVENIERSBERG 24
9000 GENT

Tel. : 32 - (0)9 - 264.34.61
Fax. : 32 - (0)9 - 264.35.92

WORKING PAPER SERIES

5

- 00/80 **K. DE WULF, G. ODEKERKEN-SCHRÖDER**, The influence of seller relationship orientation and buyer relationship proneness on trust, commitment, and behavioral loyalty in a consumer environment, January 2000, 27p. (published as 'Investments in consumer relationships: a cross-country and cross-industry exploration', *Journal of Marketing*, 2001)
- 00/81 **R. VANDER VENNET**, Cost and profit efficiency of financial conglomerates and universal banks in Europe., February 2000, 33 p. (published in *Journal of Money, Credit, and Banking*, 2002)
- 00/82 **J. BOUCKAERT**, Bargaining in markets with simultaneous and sequential suppliers, April 2000, 23 p. (published in *Journal of Economic Behavior and Organization*, 2002)
- 00/83 **N. HOUTHOOFD, A. HEENE**, A systems view on what matters to excel, May 2000, 22 p.
- 00/84 **D. VAN DE GAER, E. SCHOKKAERT, M. MARTINEZ**, Three meanings of intergenerational mobility, May 2000, 20 p. (published in *Economica*, 2001)
- 00/85 **G. DHAENE, E. SCHOKKAERT, C. VAN DE VOORDE**, Best affine unbiased response decomposition, May 2000, 9 p.
- 00/86 **D. BUYENS, A. DE VOS**, The added value of the HR-department : empirical study and development of an integrated framework, June 2000, 37 p. (published as 'Personnel and human resource managers: Power, prestige and potential - Perceptions of the value of the HR function', in *Human Resource Management Journal*, 2001).
- 00/87 **K. CAMPO, E. GIJSBRECHTS, P. NISOL**, The impact of stock-outs on whether, how much and what to buy, June 2000, 50 p.
- 00/88 **K. CAMPO, E. GIJSBRECHTS, P. NISOL**, Towards understanding consumer response to stock-outs, June 2000, 40 p. (published in *Journal of Retailing*, 2000)
- 00/89 **K. DE WULF, G. ODEKERKEN-SCHRÖDER, P. SCHUMACHER**, Why it takes two to build succesful buyer-seller relationships July 2000, 31 p. (published as 'Strengthening Retailer-Consumer Relationships: The Dual Impact of Relationship Marketing Tactics and Consumer Personality', in *Journal of Business Research*, 2002)
- 00/90 **J. CROMBEZ, R. VANDER VENNET**, Exact factor pricing in a European framework, September 2000, 38 p.
- 00/91 **J. CAMERLYNCK, H. OOGHE**, Pre-acquisition profile of privately held companies involved in takeovers : an empirical study, October 2000, 34 p.
- 00/92 **K. DENECKER, S. VAN ASSCHE, J. CROMBEZ, R. VANDER VENNET, I. LEMAHIEU**, Value-at-risk prediction using context modeling, November 2000, 24 p. (published in *European Physical Journal B*, 2001)
- 00/93 **P. VAN KENHOVE, I. VERMEIR, S. VERNIERS**, An empirical investigation of the relationships between ethical beliefs, ethical ideology, political preference and need for closure of Dutch-speaking consumers in Belgium, November 2000, 37 p. (published in *Journal of Business Ethics*, 2001)
- 00/94 **P. VAN KENHOVE, K. WIJNEN, K. DE WULF**, The influence of topic involvement on mail survey response behavior, November 2000, 40 p. (published in *Psychology & Marketing*, 2002).
- 00/95 **A. BOSMANS, P. VAN KENHOVE, P. VLERICK, H. HENDRICKX**, The effect of mood on self-referencing in a persuasion context, November 2000, 26p. (published in *Advances in Consumer Research*, vol.28, 2001, p.115-121)
- 00/96 **P. EVERAERT, G. BOËR, W. BRUGGEMAN**, The Impact of Target Costing on Cost, Quality and Development Time of New Products: Conflicting Evidence from Lab Experiments, December 2000, 47 p.
- 00/97 **G. EVERAERT**, Balanced growth and public capital: An empirical analysis with I(2)-trends in capital stock data, December 2000, 29 p. (forthcoming in *Economic Modelling*, 2002).
- 00/98 **G. EVERAERT, F. HEYLEN**, Public capital and labour market performance in Belgium, December 2000, 45 p.
- 00/99 **G. DHAENE, O. SCAILLET**, Reversed Score and Likelihood Ratio Tests, December 2000, 16 p.



WORKING PAPER SERIES

6

- 01/100 **A. DE VOS, D. BUYENS**, Managing the psychological contract of graduate recruits: a challenge for human resource management, January 2001, 35 p.
- 01/101 **J. CHRISTIAENS**, Financial Accounting Reform in Flemish Universities: An Empirical Study of the implementation, February 2001, 22 p.
- 01/102 **S. VIAENE, B. BAESENS, D. VAN DEN POEL, G. DEDENE, J. VANTHIENEN**, Wrapped Input Selection using Multilayer Perceptrons for Repeat-Purchase Modeling in Direct Marketing, June 2001, 23 p. (published in *International Journal of Intelligent Systems in Accounting, Finance & Management*, 2001).
- 01/103 **J. ANNAERT, J. VAN DEN BROECK, R. VANDER VENNET**, Determinants of Mutual Fund Performance: A Bayesian Stochastic Frontier Approach, June 2001, 31 p. (forthcoming in *European Journal of Operational Research*, 2003)
- 01/104 **S. VIAENE, B. BAESENS, T. VAN GESTEL, J.A.K. SUYKENS, D. VAN DEN POEL, J. VANTHIENEN, B. DE MOOR, G. DEDENE**, Knowledge Discovery in a Direct Marketing Case using Least Square Support Vector Machines, June 2001, 27 p. (published in *International Journal of Intelligent Systems*, 2001).
- 01/105 **S. VIAENE, B. BAESENS, D. VAN DEN POEL, J. VANTHIENEN, G. DEDENE**, Bayesian Neural Network Learning for Repeat Purchase Modelling in Direct Marketing, June 2001, 33 p. (published in *European Journal of Operational Research*, 2002).
- 01/106 **H.P. HUIZINGA, J.H.M. NELISSEN, R. VANDER VENNET**, Efficiency Effects of Bank Mergers and Acquisitions in Europe, June 2001, 33 p.
- 01/107 **H. OOGHE, J. CAMERLYNCK, S. BALCAEN**, The Ooghe-Joos-De Vos Failure Prediction Models: a Cross-Industry Validation, July 2001, 42 p.
- 01/108 **D. BUYENS, K. DE WITTE, G. MARTENS**, Building a Conceptual Framework on the Exploratory Job Search, July 2001, 31 p.
- 01/109 **J. BOUCKAERT**, Recente inzichten in de industriële economie op de ontwikkelingen in de telecommunicatie, augustus 2001, 26 p. (published in *Economisch en Sociaal Tijdschrift*, 2001).
- 01/110 **A. VEREECKE, R. VAN DIERDONCK**, The Strategic Role of the Plant: Testing Ferdows' Model, August 2001, 31 p. (forthcoming in *International Journal of Operations and Production Management*, 2002)
- 01/111 **S. MANIGART, C. BEUSELINCK**, Supply of Venture Capital by European Governments, August 2001, 20 p.
- 01/112 **S. MANIGART, K. BAEYENS, W. VAN HYFTE**, The survival of venture capital backed companies, September 2001, 32 p. (forthcoming in *Venture Capital*, 2002)
- 01/113 **J. CHRISTIAENS, C. VANHEE**, Innovations in Governmental Accounting Systems: the Concept of a "Mega General Ledger" in Belgian Provinces, September 2001, 20 p. (published in V. Montesinos and J.M. Vela, *Innovations in governmental accounting*, Kluwer Academic Publishers, 2002).
- 01/114 **M. GEUENS, P. DE PELSMACKER**, Validity and reliability of scores on the reduced Emotional Intensity Scale, September 2001, 25 p. (published in *Educational and Psychological Measurement*, 2001)
- 01/115 **B. CLARYSSE, N. MORAY**, A process study of entrepreneurial team formation: the case of a research based spin off, October 2001, 29 p.
- 01/116 **F. HEYLEN, L. DOBBELAERE, A. SCHOLLAERT**, Inflation, human capital and long-run growth. An empirical analysis, October 2001, 17 p.
- 01/117 **S. DOBBELAERE**, Insider power and wage determination in Bulgaria. An econometric investigation, October 2001, 30 p.
- 01/118 **L. POZZI**, The coefficient of relative risk aversion: a Monte Carlo study investigating small sample estimator problems, October 2001, 21 p. (forthcoming in *Economic Modelling*, 2003).



WORKING PAPER SERIES

7

- 01/119 **N. GOBBIN, B. VAN AARLE**, Fiscal Adjustments and Their Effects during the Transition to the EMU, October 2001, 28 p. (published in *Public Choice*, 2001).
- 01/120 **A. DE VOS, D. BUYENS, R. SCHALK**, Antecedents of the Psychological Contract: The Impact of Work Values and Exchange Orientation on Organizational Newcomers' Psychological Contracts, November 2001, 41 p.
- 01/121 **A. VAN LANDSCHOOT**, Sovereign Credit Spreads and the Composition of the Government Budget, November 2001, 29 p.
- 01/122 **K. SCHOORS**, The fate of Russia's former state banks: Chronicle of a restructuring postponed and a crisis foretold, November 2001, 54 p. (published in *Europe-Asia Studies*, 2003)
- 01/123 **J. ALBRECHT, D. FRANÇOIS, K. SCHOORS**, A Shapley Decomposition of Carbon Emissions without Residuals, December 2001, 21 p. (published in *Energy Policy*, 2002).
- 01/124 **T. DE LANGHE, H. OOGHE**, Are Acquisitions Worthwhile? An Empirical Study of the Post-Acquisition Performance of Privately Held Belgian Companies Involved in Take-overs, December 2001, 29 p.
- 01/125 **L. POZZI**, Government debt, imperfect information and fiscal policy effects on private consumption. Evidence for 2 high debt countries, December 2001, 34 p.
- 02/126 **G. RAYP, W. MEEUSEN**, Social Protection Competition in the EMU, January 2002, 20 p.
- 02/127 **S. DE MAN, P. GEMMEL, P. VLERICK, P. VAN RIJK, R. DIERCKX**, Patients' and personnel's perceptions of service quality and patient satisfaction in nuclear medicine, January 2002, 21 p.
- 02/128 **T. VERBEKE, M. DE CLERCQ**, Environmental Quality and Economic Growth, January 2002, 48 p.
- 02/129 **T. VERBEKE, M. DE CLERCQ**, Environmental policy, policy uncertainty and relocation decisions, January 2002, 33 p.
- 02/130 **W. BRUGGEMAN, V. DECOENE**, An Empirical Study of the Influence of Balanced Scorecard-Based Variable Remuneration on the Performance Motivation of Operating Managers, January 2002, 19 p.
- 02/131 **B. CLARYSSE, N. MORAY, A. HEIRMAN**, Transferring Technology by Spinning off Ventures: Towards an empirically based understanding of the spin off process, January 2002, 32 p.
- 02/132 **H. OOGHE, S. BALCAEN**, Are Failure Prediction Models Transferable From One Country to Another? An Empirical Study Using Belgian Financial Statements, February 2002, 42 p.
- 02/133 **M. VANHOUCHE, E. DEMEULEMEESTER, W. HERROELEN**, Discrete Time/Cost Trade-offs in Project scheduling with Time-Switch Constraints? February 2002, 23 p. (published in *Journal of the Operational Research Society*, 2002)
- 02/134 **C. MAYER, K. SCHOORS, Y. YAFEH**, Sources of Funds and Investment Activities of Venture Capital Funds: Evidence from Germany, Israel, Japan and the UK?, February 2002, 31 p.
- 02/135 **K. DEWETTINCK, D. BUYENS**, Employment implications of downsizing strategies and reorientation practices: an empirical exploration, February 2002, 22 p.
- 02/136 **M. DELOOF, M. DE MAESENEIRE, K. INGHELBRECHT**, The Valuation of IPOs by Investment Banks and the Stock Market: Empirical Evidence, February 2002, 24 p.
- 02/137 **P. EVERAERT, W. BRUGGEMAN**, Cost Targets and Time Pressure during New Product Development, March 2002, 21 p. (published in *International Journal of Operations and Production Management*, Volume 22).
- 02/138 **D. O'NEILL, O. SWEETMAN, D. VAN DE GAER**, The impact of cognitive skills on the distribution of the black-white wage gap, March 2002, 14 p.
- 02/139 **W. DE MAESENEIRE, S. MANIGART**, Initial returns: underpricing or overvaluation? Evidence from Easdaq and EuroNM, March 2002, 36 p.



WORKING PAPER SERIES

8

- 02/140 **K. SCHOORS**, Should the Central and Eastern European accession countries adopt the EURO before or after accession? March 2002, 29p. (published in *Economics of Planning*, 2002).
- 02/141 **D. VERHAEST, E. OMEY**, Overeducation in the Flemish Youth Labour Market, March 2002, 39p.
- 02/142 **L. CUYVERS, M. DUMONT, G. RAYP, K. STEVENS**, Wage and Employment Effects in the EU of International Trade with the Emerging Economies, April 2002, 24 p.
- 02/143 **M. GEUENS, P. DE PELSMACKER**, The Role of Humor in the Persuasion of Individuals Varying in Need for Cognition, April 2002, 19 p.
- 02/144 **M. VANHOUCKE, E. DEMEULEMEESTER, W. HERROELEN**, Net Present Value Maximization of Projects with Progress Payments, April 2002, 23 p.
- 02/145 **E. SCHOKKAERT, D. VAN DE GAER, F. VANDENBROUCKE**, Responsibility-sensitive egalitarianism and optimal linear income taxation, April 2002, 37p.
- 02/146 **J. ANNAERT, J. CROMBEZ, B. SPINEL, F. VAN HOLLE**, Value and size effect: Now you see it, now you don't, May 2002, 31 p.
- 02/147 **N. HOUTHOFD, A. HEENE**, The quest for strategic groups: Overview, and suggestions for future research, July 2002, 22 p.
- 02/148 **G. PEERSMAN**, The transmission of monetary policy in the Euro area: Are the effects different across countries?, July 2002, 35 p.
- 02/149 **G. PEERSMAN, F. SMETS**, The industry effects of monetary policy in the Euro area, July 2002, 30 p.
- 02/150 **J. BOUCKAERT, G. DHAENE**, Inter-Ethnic Trust and Reciprocity: Results of an Experiment with Small Business Entrepreneurs, July 2002, 27 p.
- 02/151 **S. GARRÉ, I. DE BEELDE, Y. LEVANT**, The impact of accounting differences between France and Belgium, August 2002, 28 p. (published in French in *Comptabilité - Contrôle - Audit*, 2002)
- 02/152 **R. VANDER VENNET**, Cross-border mergers in European banking and bank efficiency, September 2002, 42 p.
- 02/153 **K. SCHOORS**, Financial regulation in Central Europe: the role of reserve requirements and capital rules, September 2002, 22 p.
- 02/154 **B. BAESENS, G. VERSTRAETEN, D. VAN DEN POEL, M. EGMONT-PETERSEN, P. VAN KENHOVE, J. VANTHIENEN**, Bayesian Network Classifiers for Identifying the Slope of the Customer Lifecycle of Long-Life Customers, October 2002, 27 p.
- 02/155 **L. POZZI, F. HEYLEN, M. DOSSCHE**, Government debt and the excess sensitivity of private consumption to current income: an empirical analysis for OECD countries, October 2002, 19 p.
- 02/156 **D. O'NEILL, O. SWEETMAN, D. VAN DE GAER**, Consequences of Specification Error for Distributional Analysis With an Application to Intergenerational Mobility, November 2002, 35 p.
- 02/157 **K. SCHOORS, B. VAN DER TOL**, Foreign direct investment spillovers within and between sectors: Evidence from Hungarian data, November 2002, 29 p.
- 02/158 **L. CUYVERS, M. DUMONT, G. RAYP, K. STEVENS**, Home Employment Effects of EU Firms' Activities in Central and Eastern European Countries, November 2002, 25 p.
- 02/159 **M. VANHOUCKE**, Optimal due date assignment in project scheduling, December 2002, 18 p.



FACULTEIT ECONOMIE EN BEDRIJFSKUNDE
HOVENIERSBERG 24
9000 GENT

Tel. : 32 - (0)9 - 264.34.61
Fax. : 32 - (0)9 - 264.35.92

WORKING PAPER SERIES

9

- 02/160 **J. ANNAERT, M.J.K. DE CEUSTER, W. VANHYFTE**, The Value of Asset Allocation Advice. Evidence from the Economist's Quarterly Portfolio Poll, December 2002, 35p.
- 02/161 **M. GEUENS, P. DE PELSMACKER**, Developing a Short Affect Intensity Scale, December 2002, 20 p. (published in *Psychological Reports*, 2002).
- 02/162 **P. DE PELSMACKER, M. GEUENS, P. ANCKAERT**, Media context and advertising effectiveness: The role of context appreciation and context-ad similarity, December 2002, 23 p. (published in *Journal of Advertising*, 2002).
- 03/163 **M. GEUENS, D. VANTOMME, G. GOESSAERT, B. WEIJTERS**, Assessing the impact of offline URL advertising, January 2003, 20 p.