

HEI Working Paper No: 06/2007

## The Economics of Fair Trade Coffee: For Whose Benefit? An Investigation into the Limits of Fair Trade as a Development Tool and the Risk of Clean-Washing.

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### Abstract

This paper considers the system of fair trade coffee. It first gives a short description of the coffee market and some of its major trends. The origin of the fair trade movement is then explained. The structure of FLO is examined and its pricing scheme compared to those of other private labeling initiatives. Benefits generated for participants on the supply and the demand side then come under scrutiny. To gauge its potential as a development tool, revenues to coffee producers are estimated on the basis of available information. Revenues to fair trade organizations in the Western world are also examined. Finally, two hypotheses are tested on data from 13 European countries to get a better picture of what is happening on the demand side. First, an OLS regression is tested to see if consumer awareness does “make a difference”. Secondly, a treatment regression is used to correct for a sample self-selection bias and to check if there is some support for the claim that supermarkets that have started to sell fair trade coffee are clean-washing their reputation in the fair trade business.

Key Words: Coffee, Fair Trade, Development, Clean-Washing, Treatment Regression

JEL Classification: C31, D83, H23, M39

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UNIVERSITÉ DE GENÈVE

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**THE ECONOMICS OF FAIR TRADE COFFEE:  
FOR WHOSE BENEFIT?**

**An investigation into the limits of fair trade as a development tool  
and the risk of clean-washing.**

**MÉMOIRE**

Présenté en vue de l'obtention du  
diplôme d'études approfondis  
en relations internationales

Mention : Économie internationale

Par

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Genève  
Octobre 2006

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## 1. INTRODUCTION

For the last 15 years, the world of coffee has been experiencing what some authors call the “coffee paradox”<sup>2</sup>. The price of coffee is progressively sinking and millions of producers are undergoing a deep “crisis”. This is deteriorating their social fabric as well as the environment they are living in. At the same time, developed markets are “booming”, with consumers paying higher prices for more and more differentiated products. This is benefiting intermediary actors like traders, roasters and retailers who earn higher profits.

The sharpening of these trends happens to coincide with the break down of the International Coffee Agreement (ICA) in 1989, which defined a price band and put in place a system of quotas and buffer stocks guaranteeing a relative stability of prices and traded quantities. Liberalization of the coffee market has brought about many problems in producing countries, but the pressure that has arisen at the domestic and international level makes states incapable or unwilling to use market regulation as a tool to answer these problems. This political deficit has generated asymmetric benefits among private actors along the coffee value chain. It has also led to the involvement of new actors and to the development of new mechanisms to deal with the negative effects of this evolution.

Alternative trade, which aims at creating new distribution channels to near producers and consumers and to pay producers a price that enables them to live in dignity, has existed for a long time at an artisanal scale. Its development into fair trade is coincidental with the deepening of the coffee crisis. Complementarily to alternative trade, fair trade tries to use existing mainstream channels to distribute labeled coffee. The objective is to reach out to ordinary consumers, to enlarge the demand for coffee produced in sustainable social and environmental conditions.

There are several ways to try to assess the relevance and the potential of this initiative as an answer to the coffee crisis. The second section of this paper will expose some important facts about the coffee world. Before proposing a remedy, it is important to know the scale and depth of the coffee crisis, how the industry is structured and what has been so far proposed to explain the

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<sup>2</sup> Title of the book of Daviron, B., Ponte, S. (2006)

coffee paradox. The third section exposes the fair trade system: its origin, the existing organizations and the structure of FairTrade Labelling Organization International (FLO) in particular. A brief comparison with other existing private labeling initiatives illustrates how labels have become part of marketing strategies aiming at projecting a positive image of coffee brands. It also shows FairTrade is the most generous and ambitious one.

To the question “Who benefits from fair trade?” the answer of fair trade organizations is “*The FairTrade system provides tangible benefits to small-scale farmers and workers, consumers and the environment.*”<sup>3</sup> Section four of this paper tackles this question from a different perspective. It first gives an overview of benefits to producers who are involved in the fair trade network, and of the limits of these benefits. Overall financial benefits are estimated as well as the number of producers concerned and the additional per capita income generated by fair trade coffee. It then focuses on the benefits to the new intermediaries that are fair trade organizations. The last part of section four contains an analysis of benefits to retailers. Since there is no available information about margins retailers take on fair trade products, a financial analysis of their benefits is not possible. It is however possible to estimate the beneficial effects on the reputation of actors who distribute fair trade products.

Two hypotheses will be tested at that stage: first, the claim that consumer awareness can make a difference; second, the hypothesis supermarkets are clean-washing their hands in the fair trade business. Clean-washing is defined as misleading consumers by using fair trade as a marketing tool to upgrade one’s image as a responsible and socially concerned stakeholder. If supermarkets claim to help poor producers through consumer awareness raising knowing consumer awareness raising does not help poor producers, the behaviour of supermarkets only amounts to, first, raise consumer awareness that supermarkets distribute Fairtrade products and, second, strengthen the illusion they are doing something to help poor producers.

Based on the results of the previous sections, the conclusion discusses the danger of the hope fair trade is conveying and the intellectual trap parts of the movement are caught in, which consists of believing that private initiatives can be a solution to systemic problems.

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<sup>3</sup> FAQ of FLO website

## **2. SOME FACTS ABOUT THE WORLD OF COFFEE<sup>4</sup>**

The story of coffee started in the Horn of Africa, in the Ethiopian province of Kaffa, where the first coffee tree probably appeared. There are many legends surrounding the discovery of the properties of coffee beans. What can historically be attested is coffee beans used to be chewed by African slaves brought to Arab countries and coffee has been cultivated in Yemen at least since the 15<sup>th</sup> century. Mocha, one of the most important ports at that time and now synonymous with coffee, is one of the first cities where coffeehouses appeared. Coffeehouses rapidly became a widespread entertainment place throughout the Arab world, where people played chess and discussed politics.

Venetian traders first brought coffee to Europe in 1615, almost one century after hot chocolate had started to become fashionable and only five years after tea was first sold in Europe. Europeans then started to cultivate coffee in their freshly acquired colonies. At the end of the 17<sup>th</sup> century, the Dutch started to grow coffee in India and in Java. Twenty years later, French, Dutch and British sailors brought coffee to the Caribbean islands and to Surinam from where it reached South and Central America. In 1825 coffee culture started in Hawaii. In two centuries, coffee had spread around the whole world.

Coffee trade has grown since then to become the second or third largest commodity traded internationally, mainly on the markets of London (London International Financial Futures and Options Exchange or LIFFE) and New York (Coffee, Sugar and Cocoa Exchange or CSCE, which is a part of the New York Board of Trade or NYBOT). It has been a major foreign exchange earner in many developing countries and some countries still rely on coffee for up to 80% of their export revenues. Trade patterns have evolved over time traditionally benefiting big exporters like Brazil, Columbia and now Vietnam. From 1957 to 1989 the coffee market was regulated by the ICA, which regrouped both exporting and importing countries. The instability generated by its fall is affecting more than 25 millions producers who depend on coffee for their income. Around 125 millions people are indirectly concerned.

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<sup>4</sup> More detailed information about the history can be found on the website of the ICO ([www.ico.com](http://www.ico.com)) or in the second chapter of Daviron, B., Ponte, S. (2006)

## 2.1. The coffee crisis

After the Second World War the international community thought about the creation of a series of intergovernmental institutions able to protect and develop the multilateral trading system, which had collapsed in the 1930's. The IMF was created, but the projects of an International Trade Organization and of an International Commodity Stabilization Fund were dropped. The IBRD was of course set up, but it lacked resources. It is the Marshall Plan, which contributed to the reconstruction of war-torn Europe. Interests of developing countries, most of them still colonies at the time, were left aside at the Bretton Woods Conference.<sup>5</sup>

Coffee is the only commodity for which a multilateral framework could be set up. The ICA lasted for 32 years, but collapsed under the growing pressure for liberalization and under the problems of free-riding generated by members overselling their quotas. The collapse of the ICA was followed by two important trends. It first released market forces, which had been contained up to that point leading to growing concentration among traders and roasters who were able to capture a growing share of the revenue generated by the coffee business.

Secondly, liberalization of the market along with the rise of Vietnam as the third biggest exporter also led to an increase in production, price instability and price decline. This has generated a set of negative externalities for rural communities. Coffee price instability is not only threatening the livelihood, the social and ecological fabric of millions of small coffee producers across the Southern world, it is destabilizing their families and communities who rely on coffee as their main source of income.

The elements of the coffee crisis are well known and analyzed in many studies. The ICO<sup>6</sup> mentions producing countries have seen the price of coffee drop from 120 US\$ cents/lb in the 1980s to less than 50 US\$ cents/lb in 2003. At the same time their coffee income has dropped from US\$ 12 billions to US\$ 5 billions, despite growing volumes being sold. In countries dependent on coffee income, this has very severe consequences like unemployment, poverty,

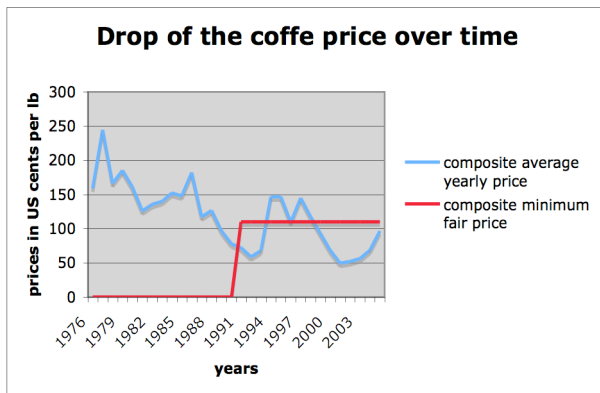
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<sup>5</sup> UNCTAD (2002)

<sup>6</sup> ICO (2003) and ICO (2004)

migration, mainly men leaving their family behind as they are looking for an income they can live on in big cities or abroad, degradation of coffee trees which need several years of attention before they can produce good coffee again. The list of negative consequences is long and the analysis of causality relations between these phenomena is complex and region specific. It is not the purpose of this paper to offer a detailed analysis of this issue.

**Figure 1:**



*Source: ICO and FLO<sup>7</sup>*

## 2.2. The coffee boom

On the demand side things have also changed since the end of the 1980s. The landscape evolved with the rise of new patterns of consumption like specialty, fair trade, organic and other sustainable coffees becoming popular among consumers. Coffee bar chains and other new ways of consuming coffee have developed. Consumers are now faced with hundreds of combinations of coffee variety, origin, brewing and grinding methods, flavouring, packaging, and ambiance, sustainability or fair content being only one among many attributes used as weapons in the marketing battle to increase market shares. Pricing margins of more and more differentiated businesses concepts like Starbucks or products like Nespresso are generating huge profits, but these are of course concentrated at the top of the coffee value chain.

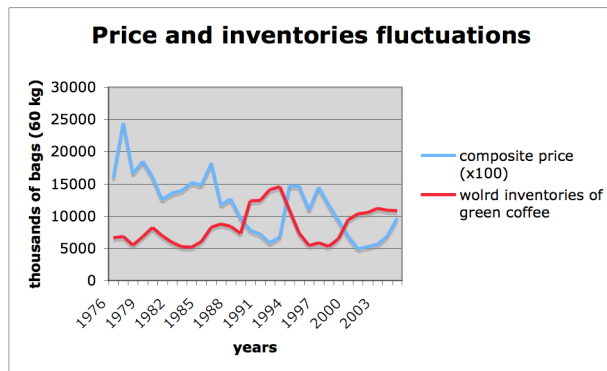
<sup>7</sup> The composite average yearly price is computed by averaging monthly price of the composite price index provided by the ICO. The composite minimum fair trade price is computed by weighting the minimum fair trade price for robusta (1/3) and arabica (2/3). The weights are similar as those used for the ICO composite price index.



### 2.3. Explanations to the coffee paradox

There are at least three different kind of explanations to the coffee paradox. The first is oversupply. Since the end of the 1980s coffee production has indeed increased, but so has demand. Inventories do not show any clear trend. Therefore oversupply does not seem to satisfactorily explain the magnitude in the price drop.

Figure 2:



Source: ICO<sup>8</sup>

A second explanation is based on the suspicion that the fall of the ICA and the following restructuring and concentration movements within the industry may have generated hidden market power. Presently, at the trader level the top three companies (Neumann, Volcafé and Ecom) control about 45% of the market. At the roaster level, Philip Morris, Nestlé, Sara Lee, Procter and Gamble and Tchibo control 69% of the market.<sup>9</sup> Within some national markets concentration is even more accentuated. For example, five actors control 70% of all exports in Columbia. In the USA and in Germany, 5 roasters respectively control 80% and 84% of the market.<sup>10</sup> These elements, however, do not allow us to conclude it is a “roaster conspiracy” that is responsible of the coffee crisis.

<sup>8</sup> Inventories of Cyprus and Ireland were not included in the world inventory because data was not available over the whole period.

<sup>9</sup> Daviron, B., Ponte, S. (2006).

<sup>10</sup> Sheperd, B. (2004).

What the economic literature has been able to identify is an increasing gap between producers and consumers prices of coffee, with producers progressively getting a smaller share of the final price.<sup>11</sup> It has also shown the existence of an asymmetry in price change transmission: producer prices drop when consumer demand drops, but the increase is much smaller when consumer price increase.<sup>12</sup> This phenomena supports the hypothesis demand is driven by product innovation.

In this context it would be possible to define market power in an unorthodox way, not as the ability to control quantities and prices, but as the “*ability to define the identity of a coffee, in other words the ability to set the language and the reference values that determine production norms and quality standards*”<sup>13</sup>, a kind of monopoly on value-added based on the capacity to control information flows and shape the way people think or do not think about coffee. An interesting debate around this issue can be illustrated by the discussion about the falling share of the final price that goes to producers. More traditional authors explain this by the increase of “non-coffee costs”<sup>14</sup> whereas more progressive authors consider this as a “*creation of value that accrues to non-material attributes of coffee*”.<sup>15</sup>

These terminology variations could seem to be a detail, but they are fundamental in defining different approaches to the coffee crisis. The way one thinks about the profits of Starbucks or Nestlé will not be the same if one considers they are arising from “non-coffee” innovations or if one considers they are arising from non-material attributes coffee producers are not able to profit from because too many barriers are separating them from consumers.

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<sup>11</sup> According to Talbot, M. (1997), the share of producers in the final good price has fallen from 20% before the fall of the ICA to 13% in the middle of the 1990s.

<sup>12</sup> Morisset J. (1998).

<sup>13</sup> Daviron, B., Ponte, S. (2006).

<sup>14</sup> This is how Lewin, B., Giovannucci, D., Varangis, P. (2004) explain observed falling ratios of import price to retail price. Another World Bank economist, Krivonos, E. (2004), even tries to argue that the liberalization of the coffee industry has decreased the income of producing countries, but has increased the share of producers through the elimination of inefficiencies arising from state activity. The weakness of her argument lies in the fact she does not make the effort to explain the existence of a coffee crisis nobody is contesting.

<sup>15</sup> This critical comparison and the following example of the wine industry are made by Daviron, B., Ponte, S. (2006).

The absence of direct relationship, the geographic and cultural distance between producers and consumers is so large that producers are unable to commercialize and maybe even to imagine a final product that would be attractive for consumers. Consumers at the other end of the commodity chain don't know anything about coffee as a product and rely on the information passed on by intermediaries. Global players among traders, roasters and even retailers perform this strategic role of intermediary and they fill the gap not with product information, but with brand advertisement that reinforces the power of their trademark and puts a veil on the original product and the producer. Any market needs intermediaries, but the barriers along the coffee value chain seem to be particularly high. The industry of wine for example, which is mostly developed in Western countries, does not know such a situation. Much more efforts are made to protect the rights of producers so as to enable them to themselves add value to their product and collect a benefit that does not arise from a "non-wine" activity, but from "non-material attributes of wine".

### 3. THE FAIR TRADE SYSTEM

Fair trade presents itself as a way not to fill the gap between producers and consumers with advertisement and trademarks, but as a way to build the gap through more direct relationships that benefit all actors. Historically, alternative trade first developed in the 1950s, mostly on the initiative of religious or political utopian groups who established parallel commercial networks. The idea to use conventional commercial networks to give Southern producers a direct access to consumers only appeared later on. It became possible when the Dutch fair trade association created the first Max Havelaar label in 1988. Fair trade labelling made it possible to sell fair trade coffee in conventional shops and supermarkets. This possibility triggered the creation of many other national initiatives, which have since started to cooperate.

A FINE<sup>16</sup> statement defines fair trade<sup>17</sup> as

*“(...) A trading partnership, based on dialogue, transparency and respect, that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing their rights of, disadvantaged producers and workers – especially in the South. Fair Trade organizations (backed by consumers) are actively engaged in supporting producers in awareness raising and in campaigning for changes in the rules and practices of conventional international trade.”*

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<sup>16</sup> FINE is a discussion forum created in 1996 for FLO, IFAT, NEWS and EFTA. Since 2004, FINE is leading the Fair Trade Advocacy Office in Brussels to promote the cause of fair trade at the European and international levels. This statement can be found on the website of the Fairtrade Labelling Organization International. FLO International, founded in 1997, is the global umbrella organization for 19 national fair trade certification initiatives. The International Fair Trade Association (IFAT, created in 1989, formerly International Federation of Alternative Trade) is a global association of producers and traders of both FLO-certified and non-certified goods. IFAT issues a *FTO-label*, which unlike the one issued by FLO is not for products, but for organizations. The Network of European World Shops (NEWS, founded in 1994) is a network of 15 national World Shops associations in 13 different countries that tries to promote fair trade and increase consumer awareness. The European Fair Trade Association (EFTA, created in 1990) is an advocacy and research body dedicated to fair trade, which regroups eleven fair trade organizations.

<sup>17</sup> “Fair Trade” or “fair trade” written in two words is used for the fair trade movement as a whole whereas “FairTrade” written in one word is used to describe the certification and labeling system governed by FLO.

### 3.1. Principles shaping rules established by FLO International

What the consensual statement above concretely means for fair trade coffee can be summarized in several points:<sup>18</sup>

- Agreed minimum price, usually set ahead of market minima (and never below).
- Focus on development and technical assistance via the payment to suppliers of an agreed social premium (around 10 per cent of the price of the good, 5 percent for coffee).
- Direct purchasing from producers to lessen the influence of intermediaries. This significantly increases the revenue of producers.
- Transparent and long-term trading partnerships.
- Co-operative, not competitive, dealings. This commitment of fair trade partners can also lead to better product quality.
- Provision of credit when requested. Producers can ask the importer up to 60% of the total purchase amount in advance. This is very useful in a context where credit is often not available.
- Provision of market information to producers. This can be useful to fair trade producers who typically still sell the bulk of their production through conventional channels.
- Farmers and workers are organized democratically in cooperatives applying the one farmer, one vote principle to manage the allocation of the social premium.
- Sustainable production is practised. The FairTrade label includes environmental standards and around 50% of FairTrade labelled coffee is also organic labelled.
- No labour abuses occur during the production process. Child and slave labour are prohibited and workers must be allowed to unionize.

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<sup>18</sup> This 10 points categorization is taken from Nicholls, A., Opal, C. (2005) and can be found at [www.fairtrade.net](http://www.fairtrade.net). He then also explains how each of these principles is suited to address market failures that exist in many Southern countries, but this is not reported here. These principles do not solve all problems and some shortcomings of these principles will be examined further on in section four.

### 3.2. The structure of FLO

These principles and the specific rules are set by Fairtrade Labelling Organization International. FLO was created in 1997 in Bonn, Germany, to give momentum to the fair trade movement. All fair trade associations joined to establish rules and standards that are common to all actors.<sup>19</sup> This move proved necessary to put an end to the increasing number of private initiatives that was starting to confuse consumers and threatened to discredit all socially oriented labels.

The work of FLO International can be divided in two parts that are covered by two distinct organizations (see figure 3). *FLO International e.V.* is establishing rules and standards according to the principles outlined above, *FLO-Cert GmbH* certifies producers, traders and manufacturers who comply with these rules. The FLO Stakeholders Forum (FLOSF) is composed of producers, traders and national initiatives (NI) representatives. The FLOSF elects the Board of Directors (BD). Representatives are granted a three-year term. It must be noted that NI representatives are elected by the Meeting of Members, not by the FLOSF.

The BD holds the supreme power in the organization. Decisions are taken by consensus and the President of the Board has the casting power if consensus proves impossible. The BD appoints the members of the Standards and Policy Committee (SPC), the Certification Committee (CC) and the Appeals Committee (AC). The SPC distinguishes between fair standards that apply to small farmers or to workers in factories and plantations. It also determines fair prices for certified products. External experts are associated to these tasks. The CC takes certification decisions and the AC deals with appeals regarding these decisions.<sup>20</sup>

Standards and labels are tools of power because they are defining rules and monitoring flows of information between actors. They are strategic instruments, which result from the asymmetry of power existing in the institution in which they have been created. The representative nature of

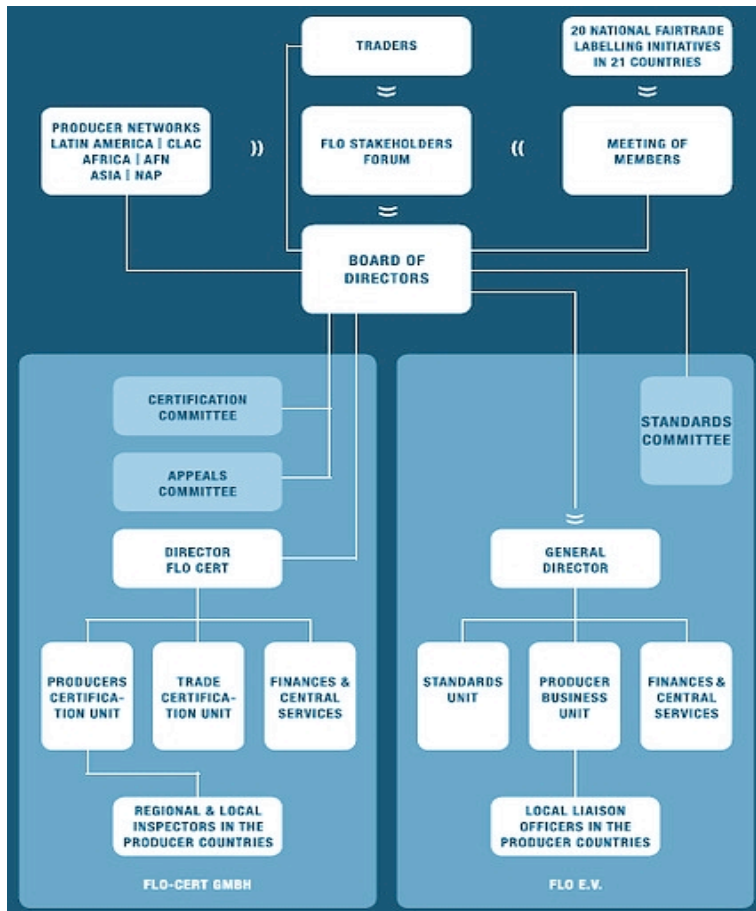
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<sup>19</sup> 20 national organizations are now gathered by FLO. All follow the same rules and standards. All use the Fairtrade label except Transfair USA, Transfair Canada and Max Havelaar Switzerland, but this is a choice motivated by marketing reasons. Since consumers are accustomed to the existing logo, a switch from the domestic label to FairTrade would decrease sales.

<sup>20</sup> See Vallejo, N., Hauselmann, P. (2004) for more details.

FLO is extremely important because it guarantees the interests of all actors can be taken into consideration. It must however be noted that NIs are given slightly more weight than other actors. Presently, Barbara Fiorito is President of the BD. She is the first President who is not a NI representative, but neither does she have a trader or a producer background. She has been Deputy Chair of Oxfam International from 2000-2005

**Figure 3: The structure of FLO International**

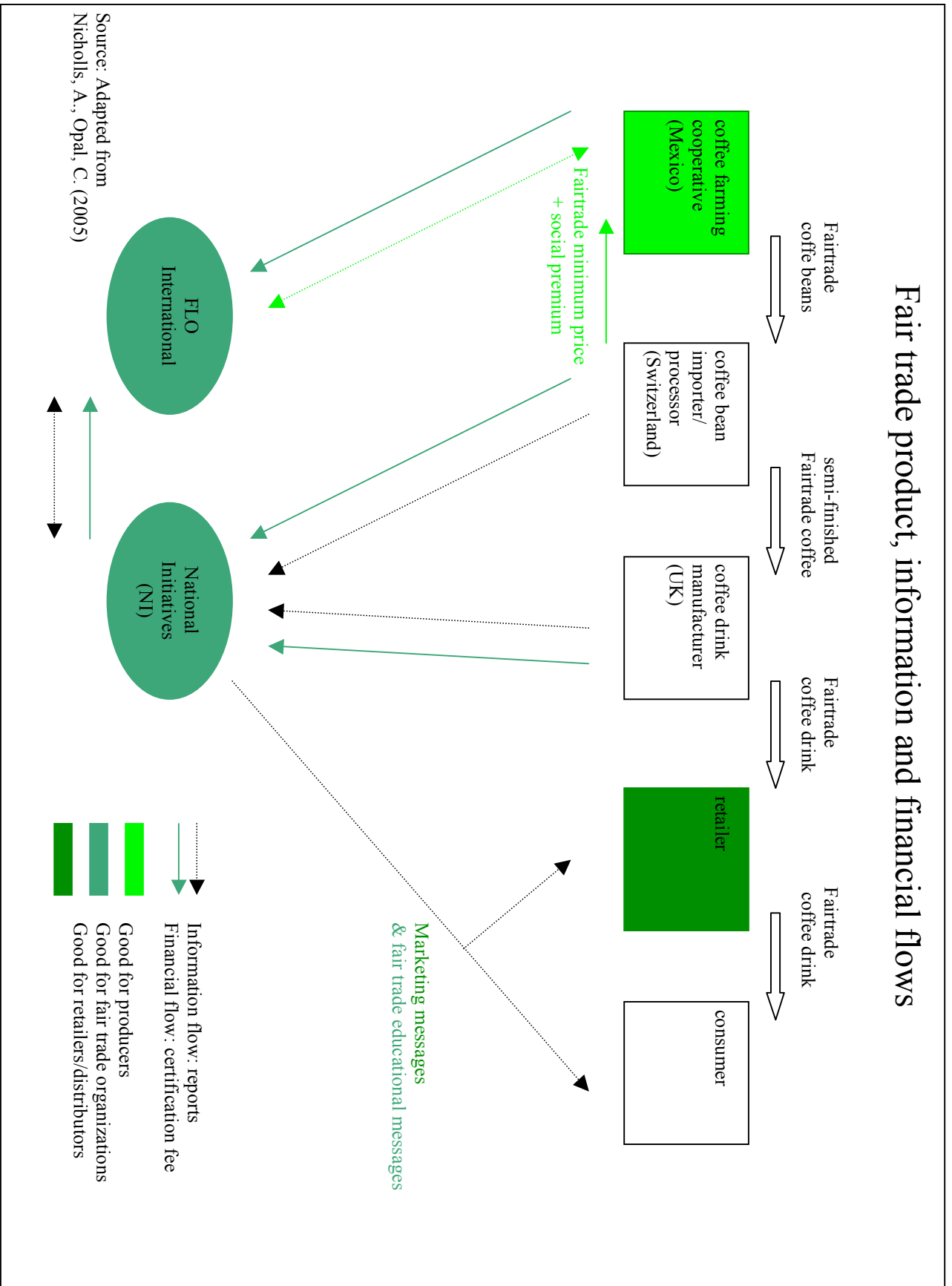


Board of Directors is composed of 13 members:

- 5 NI representatives
- 4 producer representatives
- 2 trader representatives
- 2 independents

Source: FLO

# Fair trade product, information and financial flows



Source: Adapted from Nicholls, A., Opal, C. (2005)



### **3.3. A comparison of private labelling initiatives**

The issue of labelling is a political one. Standards always profit some actors, sometimes even a vast majority of them. In the coffee market, standards used to be set by state regulation. Regulatory power has progressively shifted towards private actors, leading to a privatization of standards. Today, consumer associations request more and more information not only about the product itself, but also about its production and processing method.

As fair trade labels started to increase their visibility by fulfilling these demands of the public, other actors tried and still try to surf on the same wave. Labels are supposed to be a way to discipline the flows of distorted information and manipulative images that are used in advertisement. But when labels themselves proliferate and are used as ad hoc marketing tools they can confuse consumers and undermine the credibility of labels in general. When national initiatives of fair trade created FLO in 1997, it was clear this new label would not be able to gather all existing supposedly socially-concerned labels, not only because their objectives are different, but because some supposedly socially-concerned labels are void of any social content. The confusion often arises through the use of terms like “sustainability” or “responsibility”, which are vague enough to let people believe what communication experts want them to believe. It is patent when examining the marketing rhetoric and pricing schemes of the most widespread labels.

### 3.3.1. Without a financial compensation

#### Utz Kapeh

*“Utz Kapeh, which means “good coffee” in a Mayan language, is a global coffee certification program. With Utz Kapeh, your favorite coffee brand knows exactly where their coffee comes from and that it was grown responsibly. Utz Kapeh-certified coffee growers take care of local communities and the environment.”<sup>21</sup>*

Utz Kapeh is the name of a foundation set up in 1999, based in Guatemala and the Netherlands, where Max Havelar was first created in 1988. It was set up by Ahold, one of the world’s largest retail chain, then became an independent initiative. This foundation has set up a code of conduct containing social, environmental and food safety standards. The issue is none of the social standards is compulsory. Concerning the pricing scheme, there used to be ridiculous financial premium, which has now been abandoned.<sup>22</sup>

#### Starbucks’ CAFE initiative

*“Starbucks developed socially responsible coffee buying guidelines called C.A.F.E. Practices (Coffee and Farmer Equity Practices) in 2001. These guidelines are designed to help us work with coffee farmers to ensure high-quality coffee and promote equitable relationships with farmers, workers and communities, as well as protect the environment.”<sup>23</sup>*

Starbucks has launched the CAFE initiative in 2001. It is also built around a code of conduct containing many environmental and technical standards and a point system to classify producers. Producers with most points are privileged by Starbucks, but there is no premium paid to producers. The rhetoric however is once again about “social responsibility” or “equitable

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<sup>21</sup> Answer to the question “What is Utz Kapeh?” on the website of Utz Kapeh.

<sup>22</sup> Roasters used to pay \$0.01/kg to the foundation. See Ponte, S. (2004) for more details.

<sup>23</sup> Starbucks’ website.

relationships with communities”.<sup>24</sup> Starbucks is trying to mix up two different things: conventional business and social responsibility. Starbucks is paying the market price for high-quality coffee, but no premium is involved. The business concept of Starbucks is conventional. It is an abuse of language to call this socially responsible business.

There are other initiatives like the Common Code for the Coffee Community (4C), which aims at becoming an industry-wide applied code, or the Sustainable Agriculture Initiative (SAI), which are supported by big firms like Sarah Lee or Nestlé. These groups then also have their own internal codes, etc.

The problem with all these codes is that quality improvement and implementation of environmental or any other standards are costly and that, in absence of any premium, compliance costs are totally shifted to producers who are already undergoing a crisis. Most labelling initiatives do not bother to raise this issue. The answer of the 4C initiative is *“experience of other sustainable green coffee projects has shown that the so-called costs of compliance are partially offset by savings e.g. due to more effective management practices and better trained workers. Coffee trade and industry as well as partner organizations and institutions will support producers in the development of tailor-made management plans. The verification costs are part of the overall costs of the coffee and will be included in the calculation of the individual buyers and sellers.”*<sup>25</sup> Crudely said, these codes do not care about the interests of producers. What these codes do is not helping producers, but putting new barriers to select the ones most able to fulfil these standards without any financial counterpart.

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<sup>24</sup> This terminology seems odd when one knows Starbucks is discouraging unionization among its own employees: “We firmly believe that the direct employment relationship which we currently have with our partners is the best way to ensure a great work environment. We believe we do not need a third party to act on behalf of our partners. We prefer to deal directly with them in a fair and respectful manner, just as we have throughout our history.” Starbucks Position Regarding Unions Representing Our Partners, December 2005.

<sup>25</sup> Common Code for the Coffee Community: New Frequently Asked Questions. Available at [www.sustainable-coffee.net](http://www.sustainable-coffee.net)

### 3.3.2. With a financial compensation

The Fairtrade label certified by FLO is actually the only label, which offers a financial counterpart to help producers adapt to the standards it wants to promote.<sup>26</sup> FLO offers a minimum price for the four traditional coffee varieties that is never below the market price, often above it. Producers get an additional premium if the coffee is also organic certified<sup>27</sup> and, on the top of that, a social premium to spend for projects at the level of the cooperative.

**Table 1:**

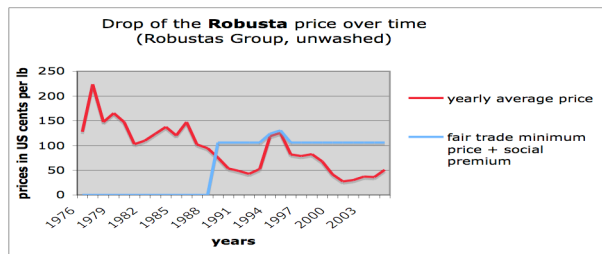
**Fairtrade minimum price and Premium information**

Type of coffee	Fairtrade minimum price				Fairtrade Premium
	conventional		organic		Conventional and organic All regions
	Central America, Mexico, Africa, Asia	South America, Carribean Area	Central America, Mexico, Africa, Asia	South America, Carribean Area	
Washed* Arabica	121	119	136	134	5
Non-washed Arabica	115	115	130	130	5
Washed* Robusta	105	105	120	120	5
Non-washed Robusta	101	101	116	116	5

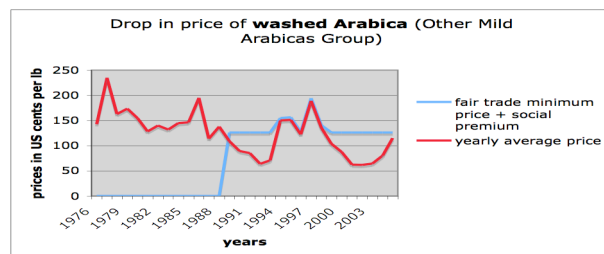
\* Semi-washed or pulped natural coffee are regarded as washed coffee.

Source: FLO

**Figure 5:**



**Figure 6:**



Source: ICO and FLO. Robusta<sup>28</sup> is the coffee for which the price difference has been highest and washed Arabica the coffee for which it has been lowest.

<sup>26</sup> Coffee certified by organic and shade-grown labels (Bird-friendly, Rainforest Alliance) is also sold at a price above the market price, but it is not the result of a fixed premium. It equates to selling coffee on a different market. Productivity in these kinds of culture is lower, production more scarce. Coffee is therefore more expensive. The premium offered on these different markets have been estimated by various authors, but they are far below the premium offered by FairTrade. See Ponte, S. (2004).

<sup>27</sup> Around 40% of Fairtrade coffee is double certified, this means certified organic and Fairtrade.

<sup>28</sup> Almost all robusta production is unwashed. FLO makes a distinction, but the ICO does not provide statistics for washed robusta.

## 4. FOR WHOSE BENEFIT?

### 4.1. Benefits to producers

Such a system of course generates benefits for producers who participate in fair trade and the reality of these benefits is not put into question. Websites of fair trade organizations display many success stories explaining to the reader how the life of producers has been changed. A more complex question concerns the limits of these benefits rather than their existence or their nature.

There are many methodological problems encountered when assessing the impacts of fair trade on producers<sup>29</sup> and because it is not easy to disentangle it from that of other factors. Many descriptive case studies have been made in the field, but the fact that many of them only describe one point in time is problematic. Case studies involving quantitative case studies are rare because it is difficult to gather quantitative information in a reliable way in the field.<sup>30</sup> Broader research programs drawing on several case studies are interesting because the methodological coherence allows for comparisons and more general conclusions.<sup>31</sup>

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<sup>29</sup> For an extensive discussion of methodological problems, see Paul E. (2005) “Evaluating Fair Trade as a Development Project: Methodological Considerations”. Her article examines the issues that are linked to the use of quantitative, qualitative, participatory and other methods and how criteria established for the assessment of development projects (by the OECD and other institutions) can be applied to fair trade projects on the field.

<sup>30</sup> See Bechetti, L., Costantino, M. (2005) and Bacon, C. (2005).

<sup>31</sup> Since no case study has been made for this paper, it is more relevant to expose the impact of fair trade and some problematic aspects of it in a general manner. The sources used here are two academic research programs available on fair trade. The first is from the Colorado State University, which has published seven case studies made in coffee cooperatives (see <http://www.colostate.edu/Depts/Sociology/FairTradeResearchGroup/> and Taylor, P. (2002)). The second is from the Université de Liège and has been realized in collaboration with the Belgian Science Policy. It draws on four case studies, two of them in coffee cooperatives and two others in the banana sector.

#### 4.1.1. Benefits in general

Observed benefits to producers who trade according to fair trade principles cited above, and some of their limits, can be regrouped under several points.<sup>32</sup>

- First, *income* of small producers often rises due to the fair trade minimum price and social premium. This is true, but often limited by two factors. The first problem is that even with a growing market, Fairtrade coffee is oversupplied. This means the share of coffee a certified small producer can sell through fair trade channels is often only 30%. The rest has to be sold on the conventional market without any premium. If this is not much, it is however often enough to act as a partial subsidy preventing rural migration. An important critique made to fair trade is that it cannot reach the poorest areas where producers are not organized in cooperatives or that some cooperatives will not let enter farmers without meeting certain internal standards. The second factor is the social premium is often not redistributed to the farmers, but used at the level of the cooperative for collective projects. This can be positive, but it does not directly raise the income of small producers. Another issue is that if the cooperative is too big, then the project may not benefit all members equally. Some of the members may actually not see them at all if the organization is too big.<sup>33</sup>
- Second, fair trade is enhancing *price stability*. The minimum price and long-term partnerships make it easier to estimate future income. Coffee growers can then better allocate their income and better invest into education or long-term projects. Long-term partnership can however not be enforced and a trader cannot be sanctioned for switching from one producer to another. The fact growers can request up to 60% of pre-financing protects them from local middle-men who make a lot of profit when farmers have to sell part of their production under the market price because they are in need of immediate

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<sup>32</sup> Some authors also use binary categories like direct/indirect to classify benefits for producers.

<sup>33</sup> FLO certifies first grade organizations, but also second grade organizations (group of cooperatives, represented by leaders of each cooperative) and third grade organizations (see FLO-Cert Producer Certification Fees, 2006). This is giving producers an incentive to structure their organizations at a regional or national level. It also increases the distance between decision-makers and producers.

cash. There are some stories about producers being afraid to ask for pre-financing because purchasers threatened to terminate the partnership. There are also cases where pre-financing was granted but with interest rates annihilating part of the financial benefits.

- Fair trade promotes decent *working conditions*. The label guarantees good social, sanitary and environmental standards are observed. It also insists on the gender issue. Traditional criticisms are some standards may not be adapted to local circumstances, the minimum price may be too high or certifiers may not be empathic enough. The gender issue and the militant aspect of fair trade appear to be more a concern for certifiers than for producers themselves who sometimes see FLO standards as a kind of “nice neo-colonialism”, a fantasy of consumers that would like producers to be like them. Consumers see fair trade as a social movement, whereas most producers tend to simply consider it a niche market. The incentive to democratically organize into cooperatives contributes to the development of stronger communities, which have a stronger common identity and a feeling of pride. It however limits the scale of the business and can hinder efficiency.<sup>34</sup>
- Fair trade increases *capacity building and market access* for cooperatives. Relationships with fair trade organizations lead to an improvement of production and management methods, of quality and human capital. They also provide cooperatives market information throughout the year and ideas of how to market their products. Many cooperatives start to organize among themselves at a national level, seek for organic certifications, organize “fair tourism”, open coffee bar chains, launch their own brand, enter in contact with small roasters or multinationals to sell them their product directly. It also increases the credibility of cooperatives towards banks or government institutions, which provide other development programs. It is a kind of subsidized “market apprenticeship” that makes cooperatives more independent. In the least developed cooperatives, fair trade can however be a trap, producers being really dependent on it without being able to diversify or develop a sustainable commercial strategy.

There is no way to quantify these benefits or the dynamic they generate within cooperatives. The impossibility is not only a matter of data, but of methodology. What clearly appears is all these

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<sup>34</sup> The issue of economies of scale is best discussed in Mendoza, R., Bastiaensen, J. (2003) who are talking of “bonsai trade”.

benefits attract many producers and lead to oversupply within the fair trade market. This was aggravated by the fact that up to 2003, certification fees existed only for traders or manufacturers of fair trade products, not for producers. Now producers have to pay to get certified and they have the responsibility to find buyers for their certified products.

#### **4.1.2. An estimate of financial benefits**

What is possible to estimate are the global financial benefits that accrue to producers. Table 2 shows an estimate of yearly and cumulative financial flows accruing to producers for the period 2001-2005. It should be noted certification costs are not included in these estimations. FLO does not provide detailed figures about them. The information that is published is there are 231 certified coffee producers' organizations out of 508 certified producers' organization. The costs schemes of certification are also known.<sup>35</sup> The annual accounts of FLO International show "Membership Contributions" amount to 1'333'982 Euros.<sup>36</sup> If coffee producer organizations amount to 45% of certified members, then they contribute to around 600'000 Euros in "membership contributions" a year. So the financial costs are much smaller than the benefits. If the costs are taken into account in the computations of table 2, then the average premium for a single producer would drop by about US\$ 5 down to US\$ 180 a year.

If it is assumed that an average coffee producers' organization gathers 500 workers<sup>37</sup>, then fair trade is benefiting 115'500 out of the 25 millions coffee producers, this means 0.46% of them. It appears fair trade is generating substantive benefits but to a very limited number of producers. It is not possible to describe how a typical certified producer organization looks because there are too many differences among them. Some may be bigger or richer than others; some may gather

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<sup>35</sup> See FLO-Cert Producer Certification Fees (2006). The initial certification fee is around 3000 Euros for small farmers and cooperatives, a little more for plantations using hired labor. Renewal certification fees are rather around 2000 Euros. Fees vary according to the size of the organization, the number of certified products, etc.

<sup>36</sup> Available online at [www.fairtrade.net](http://www.fairtrade.net)

<sup>37</sup> This assumption relies on the producer organizations size categories made by FLO-cert: 0-100 members, 101-500, 501-1000, >1000 (see FLO-Cert Producer Certification Fees (2006)) and on descriptions made in the cited case studies. See also table 5 in appendix.



small farmers into cooperatives; others may be plantations using hired workers;<sup>38</sup> some may have ties with the state, others may be completely independent.

**Table 2: An estimate of financial benefits to coffee producers**

Year	Total quantities in lb (0.4536 kg)	Yearly average price difference in US\$ cents	Minimum price premium in US\$ million
2001	31,610,229.28	60.79	21.11247213
2002	34,510,141.09	57.95166667	22.0698104
2003	43,718,253.97	53.725	26.11072718
2004	53,401,675.49	41.37166667	25.29726371
2005	74,938,271.60	13.39833333	14.53677572
<b>Total</b>	<b>238,178,571.43</b>		<b>109.1270491</b>
Year	Total amount paid to producers in US\$ million	Social premium in US\$ cents	Social premium in US\$ million
2001	34.7712522	5	1.580511464
2002	37.9611552	5	1.725507055
2003	48.09007937	5	2.185912698
2004	58.74184303	5	2.670083774
2005	82.43209877	5	3.74691358
<b>Total</b>	<b>261.9964286</b>		<b>11.90892857</b>
Average yearly premium in US\$ million			21.34905269
Average yearly premium for coffee producers organization in US\$ <sup>39</sup>			92420
Average yearly premium for a single producer in US\$ <sup>40</sup>			185

Source: ICO and FLO.

Since fair trade pretends to help most vulnerable producers, this diversity can be criticized. The fact FLO does not release detailed information about all certified organizations is perfectly understandable, but it also allows to legitimately raise doubts about the claim saying fair trade is benefiting most vulnerable producers. First, non-organized producers cannot benefit from fair trade. Secondly, some producer organizations may not be among the poorest or they may

<sup>38</sup> FLO standards were first tailored for cooperatives, but later adapted to plantations using hired labor.

<sup>39</sup> According to FLO, there are 231 certified coffee producers' organizations in 2005. This number is taken as constant over the period. Considering the number of certified organizations is increasing over time, the average premium may have decreased, but when making such an inference, one should also take into consideration quantities are increasing and the world market price is fluctuating.

<sup>40</sup> It is assumed that an average producer organization gathers 500 producers.

continue to benefit from fair trade as their business is getting better. Several studies<sup>41</sup> show that partnerships are not formed with the poorest. They are formed with a fringe of the population that is certainly poor, but capable of some production efficiency. Fair trade cannot escape the fairness versus efficiency trade-off. Its capacity to loosen it through an original financial scheme is helping a tiny minority of poorer producers.

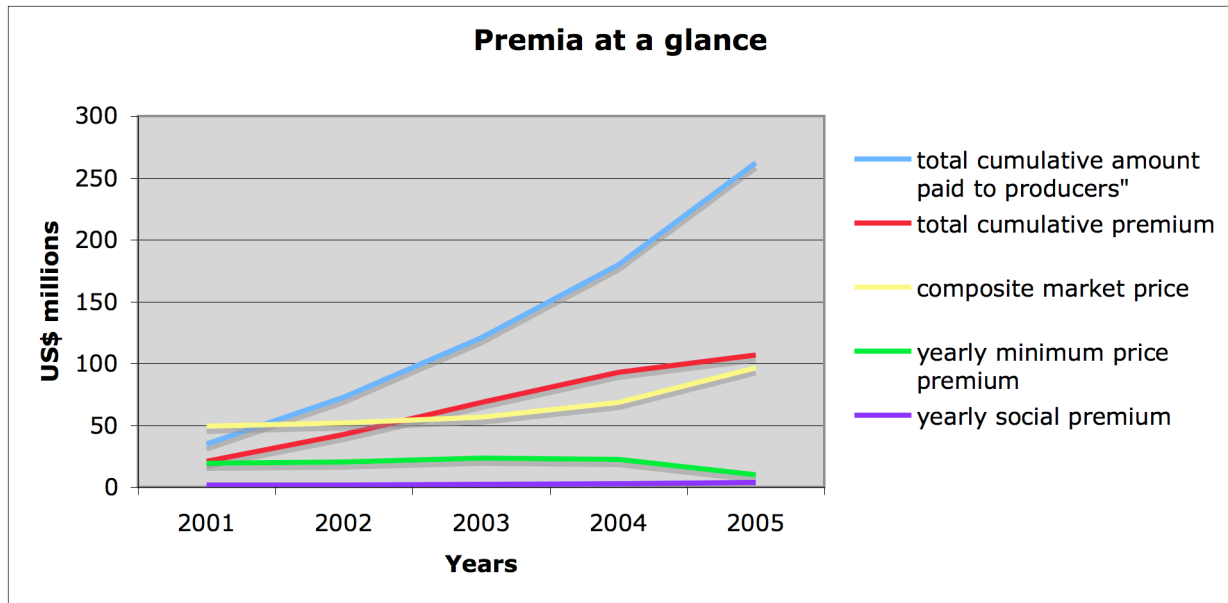
Fair trade organizations are ambiguous on this issue. On the one hand it is claimed fair trade is working because it is trade not aid. On the other hand, fair trade is said to be “in and against” the market and these organizations are using the aid rhetoric and imagery in their marketing messages. It is interesting to notice other initiatives without monetary compensations (Starbucks, Utz Kapeh, etc.) also claim to provide benefits and help producers. It is an open question to know if it is a good thing to try to help producers and if and how such an asymmetric relationship can become balanced one day. What seems to be unanimously agreed on however is the “help rhetoric” is helping marketing strategies.

The danger fair trade is conveying is the illusion to represent a sufficient answer to the problem of development and to the coffee crisis in particular. The total amount of financial transfer and the number of producers concerned are so small that it is not possible to think about fair trade as a means to reduce poverty at a large scale. The financial transfers generated by fair trade do not even amount to the public development aid of a small country. It may have other virtues: it may be better targeted, avoid state corruption, etc. However, considering the sceptical approach prevailing in the literature on public development aid, it seems odd fair trade is benefiting from such a positive media coverage. This may be linked to the interests of other actors. This issue is examined in the next sections.

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<sup>41</sup> Department of International Development (1998), Hopkins, R. (2000), Taylor, P. (2002), Belgian Science Policy in collaboration with the Université de Liège (2005)

Figure 7:



Source: ICO and FLO.

## 4.2. Benefits to fair trade organizations

There is no literature about the benefits that accrue to these “new intermediaries”. All national initiatives that are gathered under the FLO Fairtrade label are non-profit or charity organizations. It does however not mean they do not benefit from the expansion of fair trade. It is interesting to get an idea about how these organizations are financed and what amounts are involved. The direction of financial flows is depicted in figure 4. The amounts are more difficult to estimate precisely, but some features can be roughly inferred when looking at the annual accounts of these organizations.

All fair trade organizations are different and there is no point in covering all of them. The accounts of the Fairtrade Foundation (UK), Max Havelaar Switzerland and FLO International are examined here in order to give the reader an idea about this diversity. The Fairtrade Foundation has been founded in 1992 by *Christian Aid, Oxfam, Tradecraft Exchange, World Development Movement* and *the National Federation of Women’s Institutes*. At the beginning it was fully financed by these founding members. Today, 83% of the expenses are covered by traders and manufacturers certification fees income. Its board of directors hosts 12 trustees who are elected for three years. None of them is remunerated. In 2005, Fairtrade Foundation employed 25 people. None of them is earning more than £5’000 a month and the average wage was of £2220 in 2005 up from £2190 in 2004. These numbers do not include social security costs, pension contributions or agency staff costs.<sup>42</sup>

Max Havelaar Switzerland was also created in 1992 as a non-profit organization by *Pain pour le Prochain, Caritas, Action de Carême, EPER, Helvetas* and *Swissaid*. Its structure is similar to the one of other fair trade organizations. It was financially supported by the Seco at the start of the project, but is now completely independent. Certification fees cover all costs and even a little more. The average wage was of CHF 8520 all included in 2005 up from CHF 6620 in 2004.<sup>43</sup>

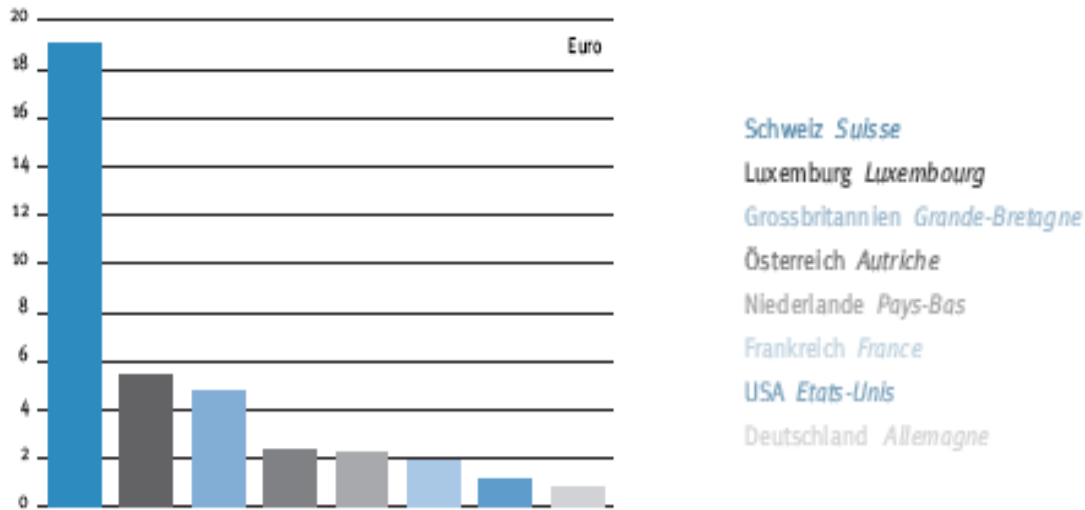
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<sup>42</sup> All these information are taken from the annual accounts of the Fairtrade Foundation, which are available at [www.fairtrade.org.uk](http://www.fairtrade.org.uk)

<sup>43</sup> These numbers are computed by dividing the salary costs by the number of employees which is taken as constant over the two years (26 at the moment according to Max Havelaar Switzerland, most of them part-time jobs). Because it is not possible to know what type of contract each

This may seem to be rather high numbers, but Max Havelaar Switzerland is probably the richest fair trade organization. This can be explained by the success of fair trade products in Switzerland.

**Figure 8: Per capita expenditure for fair trade products**



Source: *Fondation Max Havelaar (Suisse)*<sup>44</sup>

FLO International was created by national initiatives in 1997. Like the Fairtrade Foundation, (producers) certification fees do only cover part of the costs: 63% in 2005 up from 51% in 2004. It is not possible to estimate the average wage of an FLO employee based on the information that is available. Considering the organization is still financially dependent on external grants, it can however be assumed wages are not above the market average.

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employee has signed, these numbers are only indicative and should not be used for further interpretations. Furthermore, the 28% jump of the average wage seems to indicate the number of employees must have increased between the two years.

<sup>44</sup> *Fondation Max Havelaar (Suisse)*, Rapport annuel 2005.

### 4.3. Benefits to retailers

Unlike non-profit fair trade organizations, retailers do not have to be committed to any cause. The benefits that accrue to them through the sale of fair trade product are at least two-fold: financial profits and image improvement.

Retailers do not disclose any information about their pricing policy. Assuming retailers are on average adding a 30% margin on the product they sell could allow us to estimate the financial revenues from fair trade coffee, but as long as there is no observed difference in pricing policy between fair trade and conventional products, this is not very interesting. There have been isolated cases of observed abusive pricing margins. In Britain, Sainsbury was caught selling fair trade bananas four time the conventional price and Tesco PLC, another supermarket chain, was caught tacking US\$ 3.36 per pound while the grower was getting 44 cents above the market price.<sup>45</sup> Similar abuses can occur, but they are not likely because the incentives for big players are not going in that direction. On the one hand, the volumes of fair trade sales are small. The potential image gains on the other hand are big. The vigilance and communication power of consumer associations makes it not worthwhile to try to cheat on consumers this way. It is much more beneficial for retailers to use the image of fair trade to improve their own image. This raises the issue of clean-washing

Many people within the fair trade movement believe consumer awareness can substantially contribute to a solution to the coffee crisis or to poverty and development issues in general. Fair trade organizations often talk about how raising awareness of consumers can help make a difference. Supermarket chains have now jumped on that wagon and propose to consumers to “shop for a better world”. But is consumer awareness making a difference? This section looks at the validity of this first claim. It then examines a second hypothesis, namely that supermarkets are clean-washing their hands in the fair trade business. Clean-washing is here defined as

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<sup>45</sup> Stecklow, S., White, E. (2004). The Fairtrade Foundation (2005a, 2005b) answers this issue saying its role is not to check margins supermarkets are charging, but to make sure producers are getting a fair price. It also does not have the capacity to control supermarkets. It affirms abuses are exceptional and gives several example of price comparison to make its argument. The price of fair trade products may be higher, but it is due to smaller scales and higher costs of production and higher costs. See table 6 in appendix.

misleading consumers by using fair trade as a marketing tool to upgrade one's image as a responsible and socially concerned stakeholder. If supermarkets claim to help poor producers through consumer awareness raising knowing consumer awareness raising does not help poor producers, the behaviour of supermarkets only amounts to, first, raise consumer awareness that supermarkets distribute Fairtrade products and, second, strengthen the illusion they are doing something to help poor producers.

These issues have not yet been tackled in the existing literature. Several steps are needed before it is possible to test these two hypotheses. First, inspiration sources will be mentioned in a short literature review. The second step is a discussion about how possible determinants, including consumer awareness, can affect fair trade coffee market shares and how to measure them. The third step raises the issues of data choice and of the reliability of data sources. The fourth step explains the models used to test the two hypotheses and why they have been chosen. Results are then interpreted and an answer given to the two hypotheses tested.

#### **4.3.1. Literature review**

There are different kinds of literature on this issue. First, many articles deal with the question of the extent to which personal ethics influence purchasing behaviour of individuals through boycotts and other actions (Strong, 1997; Shaw and Clarke, 1999; Carrigan and Attalla, 2000; Carrigan, Smizgin and Wright, 2004; Low and Davenport, 2005). These articles are all based on group interviews and their conclusions vary according to the observed sample and employed methodology. On the basis of this more psychological than economic literature it is not possible to draw definitive conclusions about the effect of ethics on purchasing behaviour, but it does not seem reasonable to assume the effect is non-existent or cannot be reinforced. Since the approach focuses on individuals and small groups, it appears that, at that level, one should consider the existing individual differences as well as the group dynamics that also have an impact.

Secondly, some economists have developed trade and microeconomic models with utility functions able to account for more complex preferences. Maseland and De Vaal (2002) compare fair trade (which he defines as trade with an additional cost), free trade and protectionism policies

in two-country comparative cost and economies of scale models. They find that although fair trade is often first best from the planner point of view, its success depends on the characteristic of the product and on the context within which international trade takes place. Kok, Nahuis and De Vaal (2004) assume trade is negatively related to labour standards in a two-country world. South, which primarily cares about material welfare, has low labour standards, but these have a negative psychological externality in the North. Trying to establish the conditions for the optimal outcome, they find a coordinated solution dominates unilateral measures by North to decrease its psychological externality. Becchetti and Adriani (2005) consider the case of two countries with perfect competition in the North and a monopolist profiting from low wages in the South. They also define a utility function of Northern consumers who care about the fairness of the good, and are more or less concerned about fairness and international equality. They establish the conditions under which a minimal share of altruistic consumers in the North can lead the monopolist to supply fair goods and pay fair wages in the South. Becchetti, Solferin and Tessitore (2005) imagine a dynamic world with two duopolists. One of them is zero profit and socially concerned. Consumers' habits follow a defined law of motion. They find the optimal price of the profit maximizing duopolist is lower than in the static case because the socially concerned duopolist would otherwise increase its future market shares due to consumers' habit formation. The threshold triggering imitation is also higher in the dynamic than in the static case, depending on the switching cost from one type of products to the other. None of these models have of course been tested yet.

Most valuable market information is in the hands of supermarket chains and fair trade organizations. Some of the latter make information available to the public on their website or upon request. The studies made by Alter Eco and PwC in France (2001), Max Havelaar and Sonocom in Belgium (2005) are the most interesting commercial studies available to the public. All point to correlations that exist between fair trade consumption, fair trade knowledge, fair trade perception, income, education, age, gender and other variables. On the academic side, the Belgian Science Policy (2005) has done a similar study for the Belgian market<sup>46</sup>. Giovannucci (2001) has issued a report on the perspectives for sustainable coffee (fair trade, organic and

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<sup>46</sup> It is actually the most complete report on fair trade that is available. It considers the supply as well as the demand side in a very detailed manner. The approaches used however draw often more on other social sciences than on economics.



specialty coffees) in North America and another about some European countries and Japan (2003, with Koekoek). These reports describe the position of sustainable coffee on each individual market through a description of the commercial partners, the expectations of the people responsible of purchase, price differentials, the structure of the retail markets, etc. Lewin, Giovannucci and Varangis (2004) draw a picture of the coffee market as a whole, which allows to put sustainable coffee in its broader economic context. The books of Nicholls and Opal (2005) as well as the one of Ponte (2006) which include the ideas he exposed in his 2004 article also help place the question of fair trade in perspective, but up to now none of all the cited contributions contain any model allowing to deal with the determinants of demand for fair trade coffee.

De Meuron (2003) has done a cross-country analysis of the determinants of demand for fair trade bananas and he finds variables like the number of shops, price differentials and advertising budget matter to a different extent. He does not touch on the issue of consumer awareness. At the microeconomic level, Becchetti and Rosati (2003) have carried out a more elaborate study based on answers of more than thousand Italian world shop clients to a questionnaire designed to this purpose. Using a simultaneous two-equation treatment regression model,<sup>47</sup> they find that awareness (the knowledge people have) of the criteria<sup>48</sup> defining fair trade has a positive impact on consumption, on the willingness to pay a premium and on the demand price elasticity.

It is obvious the issue of awareness has not been in the centre of most of these studies and only Becchetti and Rosati have used econometric tools to tackle this question. The first hypothesis of this paper is the same as the one of Becchetti and Rosati, but it is transposed and tested at a macro level. The second hypothesis about clean-washing is tested for the first time. It is the differentiation among various actors that makes it possible to test it.

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<sup>47</sup> Their sample consists of answers to a questionnaire about fair trade. It was collected in world shops only. Because world shop consumers may not be representative of all consumers, the sample is likely to be biased. The chosen model deals with this bias.

<sup>48</sup> Their variable representing awareness is scaled from 0 to 8, one point being given for each of the 8 criteria that define fair trade.

### 4.3.2. Actors and factors impacting on fair trade coffee market share

First of all, to buy fair trade coffee, consumers must know it exists and be able to recognize it. In practice it means they must be able to recognize the logo/label of fair trade products. What will be called fair trade “awareness”<sup>49</sup>, is expected to be positively related to market shares. Since awareness seems to increase with time, another variable susceptible to catch fair trade awareness is the number of years since fair trade coffee has been launched<sup>50</sup>. It is true that awareness increases with time, but using a linear variable like the number of years is probably less accurate since it omits variations that can arise through intensive media coverage, marketing and other factors that have an indirect impact through increased awareness.

World shops and volunteers probably also play an important role for the success of fair trade. These constitute the historical basis on which fair trade has developed, but it is not clear if they are a stimulator or hinder the expansion of fair trade. In countries where volunteers are numerous and world shops widespread, the structure might be less efficient or supermarket chains might be less attracted to enter the market of fair trade products, since demand is already partially satisfied. On the other hand, in a market where consumers are already educated about fair trade, it might be easier to transform them into daily consumers of fair trade coffee.

Supermarkets were inexistent at the beginning of the movement but have become important with the decision of fair trade labelling organization to go mainstream. Some in the fair trade movement have placed a lot of hope into this ideological and practical mini-revolution, but the global consequences of the entry of supermarkets into the fair trade game are not clear yet. The inclusion of supermarkets in the game makes fair trade products accessible to many more consumers. The magnitude of the impact, however, depends on the sensitivity of consumers to the fairness issue and on the effort made by supermarkets to make the product attractive.

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<sup>49</sup> The percentage of consumers able to recognize the fair trade label or logo is chosen because fair trade organizations often take it as an indicator of their own success. It is here used to verify if this indicator does mean something in terms of purchasing behavior and market shares.

<sup>50</sup> De Meuron used the number of years in his regressions and they turned out to be significant and positive.

A priori, price differential between conventional and fair trade coffee should have a negative impact on market shares. As the market studies cited earlier all show, a vast majority of the people would buy fair trade coffee if it were sold for the same price as conventional coffee. If we draw a parallel with the fair trade banana studied by De Meuron (2003) and a poll conducted within 15 EU states in 1997<sup>51</sup>, 74% of the people declare they would buy fair trade bananas at the same price, 37% would be ready to pay 10% more, 11% would pay 20% more and 5% would be ready to pay 30% more. The number might be misleading since they are based on declarations and not purchasing habits, and the parallel might be misleading too since bananas are a much more standardized commodity than coffee is. Branding plays a more important role for coffee than bananas thus hindering the readiness to switch from one brand to another for price reasons, but even if the price effect is not expected to be as strong as for bananas, it is still expected to be negative. This will be an indication about the demand price elasticity.

The number of other fair trade products in each country is another possible determinant. The more people have the choice to consume fair trade products the more they will get used to it, be able to recognize the fair trade label and consume fair trade coffee. The marketing budget of fair trade organizations should also be positive and significant.

General factors like per capita income or education might also have a positive impact on consumption of fair trade coffee. The more you earn, the less you will be hindered by the added cost of the fair premium. And the more the population is educated, the more it will be able to understand the implications of its consumption habits. These positive relations are observed in different market studies and have been confirmed at the individual level. It remains to see if they hold at the aggregate level.

Finally, the per capita coffee consumption is also a variable of interest, but its effect is difficult to guess. In his analysis of fair trade banana demand, De Meuron (2003) found there was a positive relation between quantities consumed and market shares. It is possible to understand this for a raw commodity like banana, but it is not obvious this would hold for a product like fair trade

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<sup>51</sup> Attitudes of EU Consumers to Fair Trade Bananas, EUROBAROMETER survey carried out in all 15 EU Member States by INRA in 1997.

coffee for several reasons. First, a lot of coffee is consumed out of home, and in most countries the out of home market has not yet been infiltrated by fair trade. Therefore, if the out of home consumption is large enough, a high per capita coffee consumption might have a negative effect on market shares. Second, the bigger the market, the more already established brands will fight for it. Since coffee is a product embedded with symbolic values, it might not be easy to shift consumption habits and the relation might be negative.

Other important determinants for which there are unfortunately no available data are the marketing expenditures of supermarkets, the media coverage, the number of institutions or universities that propose fair trade coffee. These factors probably have an impact, but will act as omitted variables in the empirical analysis.

#### **4.3.3. Data and the selection bias**

Different kinds of data have been used for this paper. First, there is data coming from the OECD (GDP per capita, education), which is not problematic. Then there is data taken from a report done by Giovanucci and Koekoek (2003) who estimate the price differential between conventional and fair trade coffee<sup>52</sup>. Data about per capita coffee consumption comes from the ICO. Finally, there is data about fair trade in general gathered by FINE in successive reports, and enquiries to find the lacking data.

Data about fair trade is usually scarce and not uniform. This is due to the decentralized nature of these organizations, which want to maintain their autonomy and specificities. Some progresses have been made in the last decade. In 1995, 1998, 2001 and 2005<sup>53</sup>, FINE has collected information from European fair trade organization and published a report (done by EFTA) on the state of fair trade in Europe. The reports of 2001 and 2005 contain data about the number of

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<sup>52</sup> Missing data about price differentials was completed by asking the concerned fair trade organizations (Austria, Ireland).

<sup>53</sup> Actually the report is based on data gathered between mid-2004 up to mid-2005. The years used as reference in this paper are 2001 and 2004.

supermarkets, world shops, volunteers<sup>54</sup>, and marketing expenditure of fair trade organizations in different European countries. The FINE reports are problematic for several reasons. Data about market shares is not precise enough.<sup>55</sup> Data about awareness is delicate since the polls were not designed the same way in all countries<sup>56</sup>. Some data was missing and it was necessary to contact these organizations to ask them to complete it. This was the opportunity to get some information about other variables of interest: the number of years since fair trade coffee has been launched, the number of fair trade products that are commercialized.

There have been three reasons for selecting countries and excluding others. First, the reports of EFTA only concern European countries, so even if some information is available about Japan, Canada or the USA, it was not possible to gather the same information about these countries. Secondly, Luxembourg has been omitted because the ICO aggregates it to Belgium in its statistics, so it was not possible to compute the market shares of Luxembourg as has been done for other countries. Thirdly, in some countries fair trade is a new phenomenon and fair trade organizations are not yet well-organized enough to publish information about their activities (Czech Republic, Greece, Hungary, Latvia, Lithuania, Slovakia, Slovenia) or do not do it consistently (Spain, Portugal, Malta). The sample is therefore limited to 13 countries for the years 2001 and 2004. It obviously contains a selection bias that needs to be dealt with in the econometric part. A list of countries, descriptive statistics, a correlation table and the data set can be found in appendix (table 7, 8, 9, 10).

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<sup>54</sup> The number of volunteers has not been reported in the 2005 report and is therefore considered unchanged between the two periods. The variable *vol* is however not constant because population has changed.

<sup>55</sup> Therefore, the data for market shares has been computed on the basis of numbers from the ICO and FLO for quantities of imported coffee and imported fair trade coffee. The numbers reflect the market share relative to the total coffee market in each country, including the out of home consumption market. This explains why the estimated market shares are much lower than those declared by fair trade organizations or supermarkets.

<sup>56</sup> Fair trade organizations have sent me the polls they have made so I could complete the lacking data. It is assumed reasonable to compare the numbers.

To make the following econometric analysis easier to follow, the variables will be named as follows:<sup>57</sup>

1. **mktshare**: fair trade coffee market share in percentage of total domestic coffee market.
2. **awareness**: number of people who recognizes the fair trade label per 1000 inhabitants.
3. **supermkts**: number of supermarkets per 1000 inhabitants.
4. **wshops**: number of world shops per 1000 inhabitants.
5. **vol**: number of volunteers per 1000 inhabitants.
6. **marketing**: amount spent by fair trade organizations on consumer education, public relations operations and marketing per 1000 inhabitants.
7. **price**: price differential between conventional and fair trade coffee in percent.
8. **coffee\_h**: per capita yearly coffee consumption in kilogram.
9. **educ**: average years of schooling in 2003.
10. **ft\_products**: number of other fair trade products that are commercialized.
11. **d\_aw42**: a dummy taking a value of one for observations where the awareness level is equal to or above 42%.
12. **d\_aw24100**: a dummy taking a value of one for countries where awareness has increased by more than 24% over four years.<sup>58</sup>

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<sup>57</sup> GDP per capita and the number of years since fair trade coffee has been launched do not appear in this list because they do not appear in the regressions shown in this paper.

<sup>58</sup> **d\_aw42** and **d\_aw24100** are dummies used for treatment regressions. Further explanations about this model, the role and choice of threshold dummies under 4.3.5

#### 4.3.4. Test H1: Does awareness make a difference?

##### 4.3.4.1. Model: OLS with dummies

To see if awareness matters and to differentiate among the impact of the various actors and factors, the best approach would probably consist in applying a panel data model with fixed or random effects to capture country specific factors and the influence of omitted variables. The restricted number of observations makes it impossible to use a dummy for each country in a significant way. The adopted approach will therefore be to run OLS regressions for various sets of independent variables so as to find the best possible fit using usual information criteria and, later on, to expand it with dummies regrouping countries according to a relevant criterion. A treatment regression model is used in 4.3.5. to correct for the selection bias mentioned above. The general form of the OLS equation used to estimate various models part is the following

$$y_i = \alpha + x_{1i}'\beta_1 + x_{2i}'\beta_2 + d\_time\beta_3 + d\_group_i'\beta_4 + \mu_i$$

where fair trade coffee market share is the dependent variable regressed on a constant, a first set of variables representing actors ( $x_1$ ), a second set of factors ( $x_2$ ), a time dummy marking the difference between the observations of 2001 and those of 2004 ( $d\_time$ ) and dummies regrouping countries according to a specific criterion ( $d\_group$ ).

The issue of omitted variables has already been addressed above. Their effect will be transmitted to the constant, the dummy variables and the error term. Another issue is correlation among independent variables. Looking at correlation table in the appendix, it appears multicollinearity is not a problem. Endogeneity too is not assumed to be a problem. Market shares are too small to explain the level of awareness. Assuming the opposite would overestimate the lucidity of the consumer wandering along supermarket shelves. At this stage of development, causality does not yet go the other way round. There is no way to test for autocorrelation in the present situation. The heteroskedasticity hypothesis is rejected by a Breusch-Pagan/Cook-Weisberg test.

#### 4.3.4.2. Results and interpretation

OLS regressions are reported in table 3. They are classified according to improving information criteria and reveal several interesting points. First, awareness level is always significant and has a positive sign. Its magnitude however is low. Coefficients between 0.00141 and 0.00273 mean a increase of awareness of 1 per 1000 rises fair trade coffee market share by something between 0.00141% and 0.00273%. Therefore, if there is a surge in consumer awareness of 10%, the market share of fair trade coffee will rise of at most 0.273%. In 2004, the average proportion of aware consumers was 46% and the average market share 0.77%. If there were a surge of 54% in consumer awareness so that the whole population becomes aware, then the average market share would at best rise of 1.47% and reach 2.24%. These projections do not take into account the possible decreasing impact of awareness and the interplay with other factors, but it clearly appears consumer awareness alone is not making a big difference.

An interesting phenomenon is world shops and supermarkets tend to be insignificant when regressed together. It may be due to the fact both actors are competing and behaving like substitutes to sell fair trade coffee. In this case, a high number of world shops would deter supermarkets of entering the market and vice versa. The only country, which simultaneously has high levels of supermarkets and world shops is Switzerland. One explanation could be the particular market structure of the Swiss retail sector, where the entrance of one of the two duopolists (Coop or Migros) compels the other to do the same since both supermarket chains are present almost everywhere and consumers can easily switch from one to another.<sup>59</sup> This might not be the case in country where there is a higher number of supermarket chains. For example, if an average ethical consumer lives in Germany and one supermarket chain starts selling fair trade coffee, the substitution phenomena across supermarkets might be much weaker: if ten other supermarkets cover the area and are located between his home and the supermarket selling fair trade coffee, the probability he ends up shopping in one of the nine others is relatively high.

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<sup>59</sup> A hypothesis close to the one formulated Becchetti, Solferin and Tessitore (2005).



**Table 3: OLS regressions**

<b>Converging towards the best model</b>								
	OLS_1	OLS_2	OLS_3	OLS_4	OLS_5	OLS_6	OLS_6	OLS_7
	mktshare	mktshare	mktshare	mktshare	mktshare	mktshare	mktshare	mktshare
<b>awareness</b>	0.141 (0.071)*	0.251 (0.003)***	0.225 (0.001)***	0.154 (0.013)**	0.255 (0.000)***	0.187 (0.001)***	0.273 (0.000)***	0.227 (0.000)***
<b>supermkt</b>	0.467 -0.315	0.391 -0.335	0.439 -0.169	-0.115 -0.731	0.576 (0.043)**	0.048 -0.858	1.383 (0.000)***	0.913 (0.001)***
<b>wshops</b>	13.211 -0.214	16.449 -0.13	13.815 -0.105	23.611 (0.007)***	7.979 -0.279	17.513 (0.014)**	4.697 -0.293	11.222 (0.013)**
<b>vol</b>		1.767 -0.206	1.539 -0.16	0.182 -0.861	2.742 (0.012)**	1.398 -0.132	2.603 (0.000)***	1.787 (0.004)***
<b>vol_2</b>		-3.559 (0.050)**	-3.446 (0.017)**	-1.773 -0.183	-4.754 (0.001)***	-3.108 (0.011)**	-4.403 (0.000)***	-3.435 (0.000)***
<b>marketing</b>			6.045 (0.002)***	5.006 (0.003)***	5.562 (0.001)***	4.615 (0.001)***	4.96 (0.000)***	4.473 (0.000)***
<b>price</b>					-0.901 (0.011)**	-0.849 (0.004)***	-0.639 (0.005)***	-0.651 (0.001)***
<b>coffee_h</b>							-0.101 (0.000)***	-0.083 (0.000)***
<b>educ</b>				0.208 (0.013)**		0.195 (0.005)***		0.122 (0.006)***
<b>d_2004</b>	-0.113 -0.621	-0.287 -0.174	-0.287 (0.085)*	-0.144 -0.332	-0.336 (0.023)**	-0.199 -0.102	-0.376 (0.000)***	-0.283 (0.001)***
<b>Constant</b>	-0.017 -0.946	-0.324 -0.254	-0.47 (0.044)**	-2.648 (0.004)***	-0.373 (0.062)*	-2.423 (0.002)***	0.055 -0.693	-1.3 (0.009)***
<b>Observations</b>	26	26	26	26	26	26	26	26
<b>R-squared</b>	0.423	0.607	0.776	0.846	0.849	0.91	0.949	0.97
<b>AIC</b>	39.24367	33.28099	20.63254	12.96938	12.39309	0.9547155	-13.71047	-23.51848
<b>BIC</b>	45.53415	42.08767	30.69732	24.29224	23.71595	13.53568	-1.129508	-8.421324

**Breusch-Pagan / Cook-Weisberg test for heteroskedasticity on OLS\_7**

Ho: Constant variance

Variables: fitted values of mktshare

chi2(1) = 0.90

Prob > chi2 = 0.3416, so we cannot reject Ho.

To fix the simultaneous insignificance of world shops and supermarkets, it is possible to exclude one actor, to add up both into one variable representing the total number of shops or to modify the set of independent variables selling fair trade coffee. Excluding one of the actors or summing up both variables into a variable representing the total number of shops selling fair trade coffee would make it impossible to differentiate the individual impact of each of these actors, which is the interesting part of the exercise.

Coefficients on both variables are positive, but not always significant and their magnitude vary quite a lot. It however appears world shops have an impact on fair trade coffee market share that

is around 10 times stronger than that of supermarkets. In the last regression where both coefficients are significant, the impact of world shops is estimated to be 12.29 times stronger. The absolute number of supermarkets is of course higher, but it is interesting to see one world shop is selling more fair trade coffee than 12 supermarkets.

Volunteers appear to be significant, although not in all regressions. Signs on both coefficients show the impact of volunteers decreases as their number increases. Isolating volunteers from the rest of the variables in regression 7:

$$mktshare = 1.787 vol + -3.435 vol\_2 + \dots$$

This implies volunteers have a negative impact on market share once a threshold of 0.52 volunteers per 1000 inhabitants is reached. It concerns Belgium, the Netherlands and Germany, which are all stagnating markets. This seems to confirm the hypothesis that a high number of volunteers maintains a higher degree of amateurism.

Marketing expenditure of fair trade organizations are always significant and have the expected positive sign. According to regression 7, if these expenditures increase of 1 Euro per inhabitant, market share would rise of 4.473%. Considering average marketing expenditures were of 0.055 Euros in 2004, doubling the marketing budget of fair trade organization would increase market share by 0.492%. According to this estimation, marketing seems to be a rather efficient tool to increase market shares and it would be interesting to compare the impact of marketing expenditures of fair trade organizations with that of supermarkets to see if their marketing strategies are focused on similar objectives.

The coefficient on price is significant and negative as expected. Its magnitude is less than one, -0.651 in regression 7. It means the demand is rather inelastic, consumers being less than proportionally sensitive to change in prices.<sup>60</sup> Price could explain a difference of up to 0.39% in market shares.

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<sup>60</sup> Maizel and al. estimated it for several countries in 1988 and found values ranging from 0 to -0.3 (cited in ICO (2001)).

Per capita coffee consumption is significant with the expected negative sign too. This might hint to the two facts mentioned earlier: more than half of coffee is consumed in the out-of-home market fair trade has not yet infiltrated, and powerful brands may be more willing to defend their market shares in markets where per capita consumption is high. Considering per capita consumption varies from 2.4 kg to 11.94 kg and the estimated coefficient in regression 7 is of -0.083, it could explain a difference of up to 0.79% in market shares.

Education has the expected positive sign. All consumer studies have found educated people tend to be better fair trade consumers. Considering the average years of schooling varies from 10 to 13.8, the coefficient of 0.122 in regression 7 implies education could explain a difference of up to 0.46% in market shares. Income also proved a determining factor in consumer studies, but GDP per capita proved insignificant at the aggregate level and does not appear in the regressions.

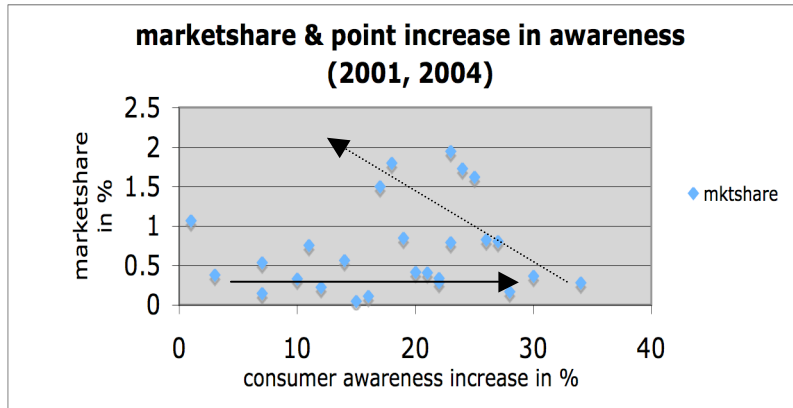
The time dummy variable is significant. Since there are only two years, the dummy acts as a kind of test indicating there is a structural change. It highlights some relevant variables are omitted in the model, but the negative sign cannot be interpreted as if the impact of determinants on market shares were decreasing with time.

Another interesting point is coefficients of world shops and supermarkets seem to be influenced by the set of other independent variables. The introduction of education increases the coefficient on world shops whereas the introduction of price and per capita consumption increase the coefficient of supermarkets. This underscores the fact these results have to be taken with caution.

Results of regressions integrating group dummies are shown in table 11 in appendix. The question is the following: what meaningful criterion can be used to regroup countries and be significantly integrated in the model? In the present case, classification of countries according to size (small, medium and big countries), or culture (Nordic, Anglo-Saxon, Latin and Germanic) doesn't work. Classifying observations (a country can jump from one category to another from year to year) according to the level of awareness (0-10, 10-20, 20-30, 30-40, 40-50, 50-100%) is significant but the pattern of coefficients is not linear. Classifying countries (not observations) according to the increase of awareness percentage point (0-8, 9-15, 16-24, 25-30, 31-100)

between 2001 and 2004 to form five different groups of countries is significant, too. This also deforms the model.

**Figure 9:**



*Source:ICO, FINE and NIs.*

Figure 9 illustrates the pattern of the coefficients of the dummies of regression `Dummies_4`. An intuitive interpretation leading to the hypothesis (examined hereafter) there is a clean-washing phenomenon would be the following: countries start with a very low awareness increase. It then jumps brutally to the right when supermarkets enter the game. Market shares however are sticky. From then on, awareness continues to increase, but less and less. During this process, market shares increase a little bit. This reasoning is based on intuition. What can be said is there exists no simple way to set up relevant categories of countries in this context.

### 4.3.5. Testing H2: Are supermarkets clean-washing their hands in the fair trade business?

#### 4.3.5.1. Treatment regression model

A treatment regression model is used to correct for the sample selection bias and to show indirect effects. This procedure will enable us to test the clean-washing hypothesis. As explained above, countries have been selected according to criteria that exclude those which are not well organized yet. It is likely countries, which already have a high level of awareness or countries where there has been a surge in awareness that are more likely to be selected. This can lead to an overestimation/underestimation of the effect of some variables and it is better to use a treatment regression model to take this bias into account. The general form of a two-equations simultaneous treatment regression model can be expressed like this:

$$y_i = \alpha_1 + x' \beta + \mu_i \quad (i) \quad \text{with } x = \begin{bmatrix} x_{11} & x_{12} & \dots & d_1 \\ x_{21} & x_{22} & \dots & d_2 \\ \dots & \dots & \dots & \dots \\ x_{n1} & \dots & \dots & d_n \end{bmatrix}, \quad z = \begin{bmatrix} x_{11} & x_{12} & \dots & z_{1m} \\ x_{21} & x_{22} & \dots & z_{2m} \\ \dots & \dots & \dots & \dots \\ x_{n1} & \dots & \dots & z_{nm} \end{bmatrix}$$

$$d_i = \alpha_2 + z' \delta + v_i, \quad (ii) \quad \text{and a covariance matrix of the following form } \begin{bmatrix} \sigma & \rho \\ & 1 \end{bmatrix}$$

where (i) is a standard equation with a continuous dependent variable, independent variables ( $x_i$ ) among which there is a particular dummy ( $d$ ). This dummy stands for a continuous determinant that has been binarized according to a discretionary threshold. This dummy is simultaneously estimated in a probit equation. The independent variables of equation (ii) can be the same as those of (i). It is advised to include at least one variable that is not present in the first equation ( $z_i$ ). The error term vectors  $u$  and  $v$  are assumed to be normally distributed, with zero mean and correlated to each other.  $\rho$  takes a value between 0 and 1, which can be positive or negative. If  $\rho$  is close to 0, the simultaneous approach is considered inappropriate. If the sign is positive, it means a separate estimation of both equations would lead to an overestimation of the effect of the dummy in (i); the opposite if the sign on  $\rho$  is negative.  $\rho$  actually tests the relevance of the procedure. It is the diagnostic and the fix at the same time.

A system of this form can be estimated by maximum likelihood or by a two-step procedure (used in the next section). If some variables are significant in both equations, it also allows to compute marginal effects, taking into account the direct and indirect impact of independent variables through the dummy variable. For example, if the outcome coefficient is  $\beta$  and the selection coefficient is  $\delta$ , then

$$dE[y | d^*=0]/dx = \beta - (\alpha \cdot \rho \cdot \sigma \cdot \delta(\alpha))$$

where  $\delta(\alpha) = \text{inverse Mills' ratio} \cdot (\text{inverse Mills' ratio} \cdot \text{selection prediction})^{61}$ . It can therefore provide a better picture of the global impact of factors that may act through multiple channels. In this section however, the regressors will prove not to be significant simultaneously in both equations, thus it won't be necessary to compute marginal effects.<sup>62</sup>

There are two intermediary steps to move from an OLS model to a treatment regression model. First, it is necessary to find a factor that captures the selection bias and make a dummy out of it. Since the hypothesis to test is the existence of a “clean-washing” phenomenon, the choice of the percentage point increase of awareness as the variable to binarize is obvious. Countries where supermarkets start commercializing fair trade products usually experience a strong rise in awareness. Fair trade organizations and supermarkets are then eager to make this rise in consumer awareness public and show how they actively participate to this consumerist revolution. They publish these numbers. Countries where this happens are therefore more likely to be in the sample and the effect of supermarkets is likely to be overestimated. How to choose a threshold able to deal with this bias? 0.24 is chosen as a threshold because it fits our assumption: countries above it (Belgium, Sweden and Ireland) are newcomers and mainstream commercialization is recent in France.

The second step consists in looking for factors explaining the dummy variable. The increase in awareness is estimated by probit in the two last regressions of table 12 in appendix. It appears supermarkets and the number of fair trade products are the most significant variables to explain

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<sup>61</sup> <http://www.stata.com/statalist/archive/2003-08/msg00570.html>

<sup>62</sup> In the part treating awareness level, world shops are significant in both equations, but there are too few observations for marginal effects to differ from the traditional coefficients.

d\_aw24100. World shops and even marketing do not seem to explain the dummy. The best relation it is possible to get is Probit 5. Omitted variables like media coverage or supermarket marketing expenditures would probably play an important role in this situation.

#### **4.3.5.2. Results and interpretation**

When both equations are estimated in a simultaneous system, it gives the results exposed in table 4. The simultaneous estimation slightly deforms the model. The absolute value of  $\rho > 0.5$  indicates it is relevant to make a simultaneous estimation. Coefficients on supermarkets and volunteers become insignificant with wrong signs. When volunteers are dropped, supermarkets remain insignificant in the main equation, while the variable is significant in the probit equation. This hints to the fact supermarkets may have no direct impact, but an influence that is mainly channelled through awareness increase. The significant coefficient and negative sign of supermarkets in the auxiliary regressions mean supermarkets happen to be few where awareness increases a lot. The increase in awareness is also more loosely positively linked to the number of fair trade products commercialized. This increase in awareness however is not a booster for market shares. The coefficient of d\_aw24100 is significant and its sign negative in all three regressions. Its magnitude between -0.77 and -0.499 means an awareness increase of more than 24% happens in countries where market shares are in average 0.49% to 0.77% lower.

Other interesting interpretations can be derived from these regressions. Once the selection bias is taken into account, it appears world shops may have an impact on market shares between 1.6 to 1.2 stronger than estimated before. Marketing is almost significant in the second regression and significant in the third, but its coefficient is less than half of the coefficient estimated previously in OLS regressions. Price and per capita coffee consumption are stable and the impact of education appears around twice stronger than before.

Supermarkets of course have a positive impact on fair trade coffee market shares. They probably account for about half of market shares, because supermarkets dominate the retail sector. Looking closer at that impact however, it appears, first, that the direct impact of supermarkets on market shares is very weak, more than ten times weaker than that of world shops. Second, taking into

account the selection bias, the indirect effect through the increase of awareness seems to be the only one that holds. If supermarkets have no independent effect on the increase of market shares, it is possible to think the recent fair trade mini-boom is a temporary trend that will soon be exhausted.

**Table 4: Treatment regressions to observe direct and indirect effects through awareness increase**

<b>Awareness increase</b>						
	Treatment_1		Treatment_2		Treatment_3	
	mktshare	d_aw24100	mktshare	d_aw24100	mktshare	d_aw24100
<b>supermkts</b>	-0.645 -0.271	-10.899 (0.051)*	-0.168 -0.729	-10.899 (0.051)*		-10.899 (0.051)*
<b>wshops</b>	31.306 (0.000)***		19.639 (0.000)***		19.792 (0.000)***	
<b>vol</b>	-1.393 -0.196					
<b>vol_2</b>	0.72 -0.559					
<b>marketing</b>	2.327 -0.208		2.444 -0.119		2.697 (0.059)*	
<b>price</b>	-0.669 (0.078)*		-0.788 (0.017)**		-0.747 (0.014)**	
<b>coffee_h</b>	-0.056 (0.055)*		-0.07 (0.010)***		-0.075 (0.002)***	
<b>educ</b>	0.251 (0.000)***		0.228 (0.000)***		0.222 (0.000)***	
<b>d_2004</b>	0.157 -0.231	1.026 -0.211	0.14 -0.224	1.026 -0.211	0.133 -0.225	1.026 -0.211
<b>d_aw24100</b>	-0.77 (0.046)**		-0.567 (0.082)*		-0.499 (0.051)*	
<b>ft_products</b>		-0.131 -0.16		-0.131 -0.16		-0.131 -0.16
<b>Constant</b>	-1.672 (0.061)*	1.566 (0.055)*	-1.597 (0.064)*	1.566 (0.055)*	-1.575 (0.075)*	1.566 (0.055)*
<b>Observations</b>	26	26	26	26	26	26
<b>rho</b>	1		0.91249		0.81201	
<b>sigma</b>	0.3250233		0.2875689		0.27736252	
<b>lambda .2283871</b>	0.44399704		0.26240313		0.2252209	



The fact that it is through a small number of supermarkets awareness in increasing a lot without a significant impact on market shares brings some support to the hypothesis supermarkets are clean-washing their hands in the fair trade business: supermarkets claim to help poor producers through consumer awareness raising, but since consumer awareness raising does not help poor producers what supermarkets are doing is, first, to raise consumer awareness that supermarkets distribute Fairtrade products and, second, to strengthen the illusion they are helping poor producers. The skilful commercial use of concepts that originally have an ethical meaning is capturing the attention of consumers. If we assume messages tend to be associated to the messenger in people's minds, then positive values and feelings associated to Fairtrade coffee will be associate with supermarkets selling it in consumers minds.

The process can be summarized in two steps. In a first step, a few supermarkets start to sell small quantities of fair trade coffee, while proclaiming they are entering a new era of good business practices, ethics being taken into account for their future strategies, etc. This is a very positive public relation operation with little effect on market shares. In a second step, competing supermarket chains also want to profit from this opportunity to promote their image as responsible social stakeholder and start to sell fair trade coffee. As this phenomenon goes on, the number of supermarkets increases and the proportion of the population susceptible to be reached by the message of fair trade slowly reaches its maximum: awareness stalls. At this point, market shares stall too or even decrease. After the ethical peak, fair trade will jump the shark.<sup>63</sup>

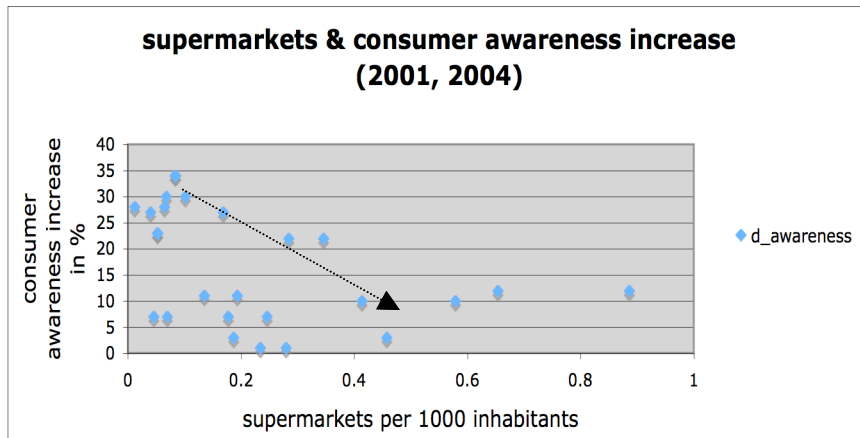
Figure 10 shows there is a big increase in public awareness when a few supermarkets enter the market, and this increase gets smaller as more and more supermarkets enter the market to profit from the reputation effect. After this fairness bath, supermarkets can pretend to have tried all they

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<sup>63</sup> “Jumping the shark is a metaphor that has been used by US TV critics and fans to denote the tipping point at which a TV series is deemed to have passed its peak. Once a show has "jumped the shark," fans sense a noticeable decline in quality or feel the show has undergone too many changes to retain its original charm. The phrase specifically arises from a scene in the hit TV comedy series Happy Days in which one of the central characters, Arthur "The Fonz" Fonzarelli, on water skis, literally jumps over a shark. The scene was written into the show at a point when the viewing ratings were beginning to drop, and it is generally regarded as the creative low-point at which the show finally lost all credibility. A show may continue well after the point when fans feel it has "jumped the shark" but will likely decline in popularity.” Definition taken from <http://en.wikipedia.org>, see also <http://www.youtube.com/watch?v=MpraJYnbVtE>.

could do to promote fairness, to have done their part of the job: they have put FairTrade coffee on their shelves and told it to everybody. Some of them may even exit the market.

**Figure 10:**



*Source: FINE and NIs*

The problem is this will not solve the coffee crisis. Supermarkets can argue consumers have to be blamed for the failure of the fair trade utopia and it is the propensity of consumers to greedily maximize utility that has thwarted the project to introduce ethics into daily life. Consumers can blame politicians for their incompetence in dealing with global poverty issues like the one of coffee producers. Politicians can blame multinationals or supermarkets chains for not caring enough about externalities generated by their activities. Nobody will seriously listen to producers anyway. To make it short, there seems to be a systemic problem: the old invisible hand is suffering from arthritis once again. Meanwhile, supermarkets are washing theirs in the fair trade business.

Results of regressions treating the selection bias arising from high level of awareness are shown in table 13. The threshold of the dummy is set at 42% awareness, but it could be higher too.<sup>64</sup>

Absolute values of rho are close to 0.5. The interpretation of estimated coefficients is similar to

<sup>64</sup> To find the threshold, the initial assumption is there is a bias in the selection of observations that favors those with a high level of awareness as explained under 4.3.3. The choice of 42 % is not the result of a reasoning like for the treatment on awareness increase, but of a process of trials and errors to find a significant relationship. The threshold is quite close to the average level of awareness over the two periods, which is of 37.6%.

that made for regression OLS 7, but there are some differences. Education drops from the main equation, but world shops are significant at 11% in the two first regressions. The coefficient on the treatment dummy is positive and means observations with a high level of awareness have around 0.7% more market share and that the probability to have a high level of awareness is positively influenced by the number of world shops and education.

The econometric results of this paper are based on data available in small quantity. Important variables are omitted. It is therefore recommended to debate their validity and pursue further investigations.

## 5. CONCLUSION

The second section of this paper has summarized known facts about the new equilibrium reached in the coffee industry after the fall of the ICA and the problems it has sharpened. The fall of the coffee price is decreasing the income of 25 millions coffee producers and indirectly affecting 125 millions of people. Section three has explained what the fair trade system is and how it works. It has shown FLO is the only private labelling initiative, which is able to somewhat loosen the fairness versus efficiency trade-off through an imaginative financial scheme. Section four has however made clear fair trade is not a tool suited to tackle issues of the size of the coffee crisis.

Additionally, OLS regressions of section four have put in evidence consumer awareness is not making a difference and treatment regressions support the hypothesis fair trade is used by supermarkets to clean-wash their reputation. Fair trade is assaulted from outside by pseudo-socially-concerned labelling initiatives aimed at confusing consumers. But the decision of alternative trade to go mainstream and develop into fair trade is also endangering itself from within. Big players like Procter & Gamble, Starbucks, Nestlé, Tesco, Carrefour and others have started to buy small quantities of FairTrade certified coffee making it even more difficult for consumers to know who is doing what.

The general impression everybody is becoming fair represents a threat for the fair trade movement. If the notion of fairness is not more precisely defined, legally protected or fair premium are not institutionalized at an industry-wide level, then fair trade will not be able to defend itself against more competitive business concepts.

Different ideas exist within the fair trade movement about how to strengthen it and guarantee its survival. Merging with other initiatives proved impossible, but some want to merge the FTO label with the FLO label, so as to label organizations and their products simultaneously. Some want to give FINE more power, but do not agree on how to do it. Some think “more of the same” is the solution and believe consumer and youth education in particular is the solution. The fair trade movement is also leading political advocacy to advance its cause. Strong relationships exist

with UNCTAD and some leaders in African countries<sup>65</sup>. Fair trade has been making its way into European institutions through the advocacy work of EFTA and FINE. The European Parliament has recently called on to the Commission to issue a non-binding recommendation and to undertake a study to examine how fair trade could develop into a model for sustainable trade policy, which would be capable of stimulating balanced North-South trade, and identify the obstacles to trade which impact most seriously on the world's poor.<sup>66</sup>

The problem of all these efforts is they are trapped in the unilateral premise of fair trade. The coffee crisis is a systemic issue that cannot be solved by isolated initiatives. Fair trade can disappear or conquer slightly larger market shares, but it does not represent a sufficient answer to the coffee crisis. Actually, a solution to this problem does not exist yet. A political will to seriously tackle this issue does not exist yet. States have abandoned their regulatory power. Private actors among traders, roasters and retailers do not have the power to unilaterally modify the equilibrium of the market. As a group however these actors could create rules that affect the whole industry. Actually, they already do. The Common Code for the Coffee Community, which is the initiative gathering the most important actors of the coffee industry is expressing these rules: those who care about sustainability, fairness or anything of that kind are free to do so, free-riding is allowed too. Fair trade is developing in this anarchy, but neither does it diminish it substantially, nor does it put an end to it. Facing difficulties to extend their principles, leaders of fair trade and producer organizations are probably resigned to remain a niche market for a limited number of coffee growers and to expand it as much as possible. Supportive consumers are condemned to hope their individual contribution and good intentions will one day lead to a breakthrough.

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<sup>65</sup> Fair trade is mentioned in the Cotonou agreement in 2000 (article 1-5 of appendix V of the convention) between The European Union and the ACP countries. The idea has been proposed that fair trade products benefits from a preferential treatment (GSP). This would not affect coffee trade since the import tax of unprocessed coffee is already 0%, but it would affect the trade of banana and honey for example. See appendix 6 of Belgian Science Policy in collaboration with the Université de Liège (2005) for more details.

<sup>66</sup> Appendix 5 of Belgian Science Policy in collaboration with the Université de Liège (2005), and <http://www.noticias.info/Asp/aspComunicados.asp?nid=198561> (06.07.2006).

## 6. APPENDIX

**Table 5: Illustration of the diversity of organization size**

<b>Table 1 Case Study Organizations</b>			
<b>Name</b>	<b>Location</b>	<b>Year Founded</b>	<b>Number of members</b>
CEPCO	Oaxaca, Mexico	1989	41 organizations 16,000
UCIRI	Oaxaca, Mexico	1981	2,076
Majomut	Chiapas, Mexico	1983	1,500
La Selva	Chiapas, Mexico	1976	943
Tzotzilotic	Chiapas, Mexico	1992	600
La Voz	Guatemala	late 70s	116
APECAFE		1997	11 cooperatives
Las Colinas		1980	99
El Sincuyo	El Salvador	2000	28

Source: Taylor, P. (2002)

**Table 6: Price break-up**

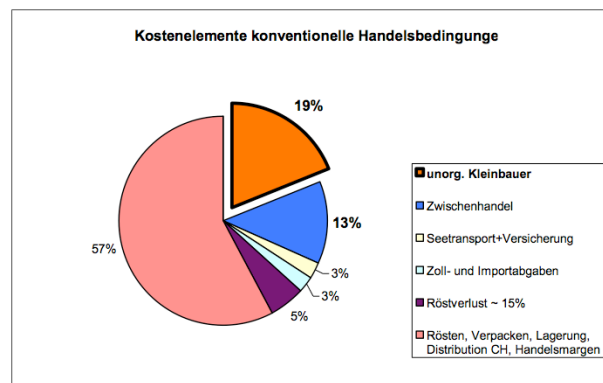
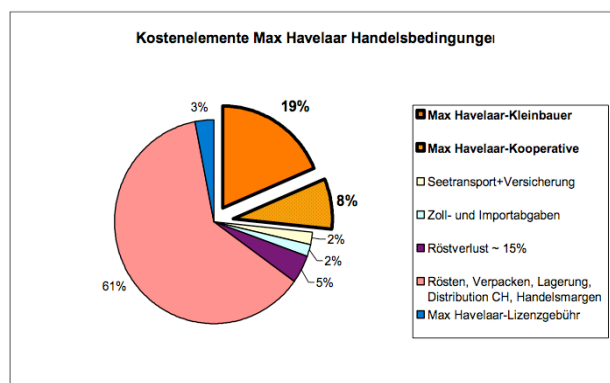
### PREISZUSAMMENSETZUNG von Arabica-Kaffees (nicht Bio)

**Beispiel: Durchschnittspreis Arabica Kaffee 2005, Contract C, ex-Dock New York**

Wechselkurs: 1 US \$ = 1.25 Sfr. Durchschnittskurs 2005  
 Max Havelaar-Mindestpreis 1a)= 1.26 US \$/lb (454g) Arabica Rohkaffee = Fr. 3.47 / kg  
 bei Weltmarktpreis von = 1.15 US \$/lb (454g) Arabica Rohkaffee = Fr. 3.17 / kg

<b>MAX HAVELAAR</b>	<b>per kg in Fr.</b>	<b>Kostenelemente KONVENTIONELL</b>	<b>per kg in Fr.</b>
Max Havelaar-Kleinbauer	2.43	unorg. Kleinbauer	1.90 5)
Max Havelaar-Kooperative	1.04	Zwischenhandel (Aufwand+Gewinn)	1.27 6)
<b>FOB-Preis</b>	<b>3.47</b>	<b>FOB-Preis</b>	<b>3.17</b>
Seetransport+Versicherung	0.25	Seetransport+Versicherung	0.25
<b>Kosten Rohkaffee bis Hafen in Europa</b>	<b>3.72</b>	<b>Kosten Rohkaffee bis Hafen in Europa</b>	<b>3.42</b>
Zoll- und Importabgaben	0.25	Zoll- und Importabgaben	0.25
Röstverlust ~ 15%	0.60	Röstverlust ~ 15%	0.55 3)
<b>Gesamtkosten bis Rösterei</b>	<b>4.56</b>	<b>Gesamtkosten bis Rösterei</b>	<b>4.22</b>
Rösten, Verpacken, Lagerung, Distribution CH, Handelsmargen	8.04	Rösten, Verpacken, Lagerung, Distribution CH, Handelsmargen	5.78
Max Havelaar-Lizenzgebühr	0.40	Max Havelaar-Lizenzgebühr	0.00
<b>Endverkaufspreis Laden</b>	<b>13.00</b>	<b>Eigenmarken-Kaffee</b>	<b>10.00 4)</b>

Das Beispiel bezieht auf durchschnittliche Preise und Kurse. Die grau markierten Elemente entsprechen den Kosten, die bei beiden Handelsformen identisch sind.



Source: Taken from Max Havelaar Switzerland.

**Table 7: List of selected countries and the selection bias**

Countries able to provide awareness statistics	Countries excluded from the sample because they could not provide awareness statistics	Countries excluded for other reasons
Austria Belgium Denmark Finland France Germany Ireland Italy The Netherlands Norway Sweden Switzerland UK	Spain Portugal Malta Czech Republic Greece Hungary Latvia Lithuania Slovakia Slovenia	USA Canada Japan Luxemburg

**Table 8: Descriptive statistics**

Variable	Obs	Mean	Std. Dev.	Min	Max
mktshare	26	.7057692	.5699556	.05	1.95
awareness	26	376.5385	193.4103	60	850
supermks	26	.2273951	.2166242	.012364	.8861321
wshops	26	.0108004	.0121619	0	.041511
vol	26	.2955277	.2708574	.0185151	.8019831
marketing	26	.0515849	.042571	.0036488	.1686431
price	26	.3061538	.1938881	.12	.75
coffee_h	26	6.818077	2.583495	2.22	11.94
educ	26	12.40769	1.034958	10	13.8
ft_products	26	8.615385	4.741957	3	26

**Table 9: Correlations**

	mktshare	superm~s	wshops	vol	market~g	price	coffee_h	educ	ft_pro~s
mktshare	1.0000								
supermks	0.0522	1.0000							
wshops	0.5465	-0.1044	1.0000						
vol	0.2154	-0.1681	0.6682	1.0000					
marketing	0.5893	-0.1111	0.3463	0.3490	1.0000				
price	-0.2227	0.1511	-0.0500	0.1314	-0.0809	1.0000			
coffee_h	-0.2840	0.6633	-0.1005	-0.0093	-0.1503	0.3095	1.0000		
educ	0.4355	0.4812	-0.0887	0.0369	0.1654	0.2051	0.1832	1.0000	
ft_products	0.4793	-0.0637	0.0975	0.1196	0.5942	0.1898	-0.1639	0.1596	1.0000
d_aw24100	-0.2812	-0.4694	-0.1036	0.0241	-0.1920	-0.1794	-0.2738	-0.2350	-0.2495
d_aw42	0.5177	-0.0856	0.4186	0.2644	0.1119	-0.0687	0.0311	0.2850	0.1713



**Table 10: Data set**

country	year	d_2004	mktshare	awareness	supermkt	wshops	vol	marketing	price
Austria	2004	1	0.54	300	0.245942	0.0122971	0.4426955	0.0859567	0.2
Austria	2001	0	0.37	230	0.17737	0.008318	0.440367	0.0464832	0.2
Belgium	2004	1	0.38	660	0.068047	0.028677	0.8019831	0.0553125	0.2
Belgium	2001	0	0.33	360	0.1009712	0.0240408	0.7933455	0.1221271	0.2
Denmark	2004	1	0.81	460	0.186602	0.0011196	0.0186602	0.0983392	0.2
Denmark	2001	0	1.07	430	0.4573227	0.0027773	0.0185151	0.0573968	0.2
Finland	2004	1	0.17	350	0.5782575	0.0048188	0.1156515	0.0578258	0.75
Finland	2001	0	0.15	250	0.4131599	0.0057383	0.1147666	0.03443	0.75
France	2004	1	0.76	510	0.1685715	0.0027814	0.0421429	0.0248306	0.17
France	2001	0	0.23	240	0.0400332	0.0014618	0.0415282	0.008804	0.17
Germany	2004	1	0.28	420	0.2795435	0.0097233	0.6077033	0.030215	0.7
Germany	2001	0	0.34	410	0.2339649	0.0084858	0.6061267	0.0157593	0.7
ireland	2004	1	0.79	440	0.0649857	0.0015597	0.1039771	0.0202755	0.3
ireland	2001	0	0.57	160	0.012364	0.0066766	0.098912	0.0420376	0.3
Italy	2004	1	0.05	300	0.0697496	0.0087187	0.0261561	0.0036619	0.15
Italy	2001	0	0.11	230	0.0455233	0.0064984	0.0260629	0.0036488	0.15
The Netherlands	2004	1	1.5	850	0.1931946	0.0256762	0.7478499	0.0466783	0.24
The Netherlands	2001	0	1.8	740	0.1351766	0.0245776	0.7373272	0.13702	0.24
Norway	2004	1	0.85	180	0.8861321	0	0.1063358	0.0239256	0.12
Norway	2001	0	0.42	60	0.6533101	0	0.1045296	0.0174216	0.12
Sweden	2004	1	0.41	470	0.0843076	0.0039344	0.2810252	0.0097797	0.35
Sweden	2001	0	0.29	130	0.0833889	0.0024461	0.2779631	0.0333556	0.35
Switzerland	2004	1	1.95	640	0.345925	0.041511	0.401273	0.0907707	0.3
Switzerland	2001	0	1.73	420	0.2841294	0.0405899	0.3923691	0.0568259	0.3
UK	2004	1	1.62	390	0.0524419	0.0016917	0.1691675	0.1686431	0.3
UK	2001	0	0.83	160	0.0518585	0.0066914	0.1672856	0.0496838	0.3
country	year	coffee_h	educ	ft_products	ftc_years	gdp_h	d_aw42	d_aw24100	
Austria	2004	7.59	11.8	14	12	33001	0	0	
Austria	2001	7.83	11.8	6	9	31625	0	0	
Belgium	2004	8.08	11.3	9	8	31740	1	1	
Belgium	2001	5.52	11.3	5	5	30370	0	1	
Denmark	2004	9.42	13.6	10	10	32361	1	0	
Denmark	2001	9.66	13.6	6	7	31697	1	0	
Finland	2004	11.94	12.1	12	6	31554	0	0	
Finland	2001	11.01	12.1	8	3	29290	0	0	
France	2004	5.02	11.5	9	13	31952	1	1	
France	2001	5.31	11.5	3	10	30622	0	1	
Germany	2004	7.4	13.4	9	12	29583	1	0	
Germany	2001	6.9	13.4	8	9	29196	0	0	
ireland	2004	3.22	12.9	9	9	38050	1	1	
ireland	2001	2.3	12.9	3	6	34038	0	1	
Italy	2004	5.58	10	5	10	28710	0	0	
Italy	2001	5.44	10	4	7	28280	0	0	
The Netherlands	2004	5.89	12.9	12	17	32393	1	0	
The Netherlands	2001	6.47	12.9	8	14	32463	1	0	
Norway	2004	9.27	13.8	7	7	40598	0	0	
Norway	2001	9.46	13.8	3	4	39128	0	0	
Sweden	2004	8.28	12.5	12	8	31842	1	1	
Sweden	2001	8.49	12.5	5	5	29751	0	1	
Switzerland	2004	5.77	12.8	13	13	35023	1	0	
Switzerland	2001	6.8	12.8	8	10	34966	1	0	
UK	2004	2.4	12.7	26	11	32414	0	0	
UK	2001	2.22	12.7	10	8	30391	0	0	

**Table 11: OLS regressions with dummies groups (awareness level and awareness increase)**

Awareness level			Awareness increase		
	Dummies_1	Dummies_2		Dummies_3	Dummies_4
	mktshare	mktshare		mktshare	mktshare
<b>awareness</b>	0.192 (0.001)***	0.187 (0.000)***	<b>awareness</b>	0.218 (0.000)***	0.226 (0.000)***
<b>supermkts</b>	0.89 (0.051)*	0.86 (0.032)**	<b>supermkts</b>	0.576 (0.077)*	0.575 (0.056)*
<b>wshops</b>	8.893 -0.427		<b>wshops</b>	9.212 (0.089)*	
<b>vol</b>	2.562 -0.357	4.694 (0.000)***	<b>vol</b>	1.602 (0.009)***	2.193 (0.009)***
<b>vol_2</b>	-4.936 -0.311	-8.619 (0.000)***	<b>vol_2</b>	-3.121 (0.001)***	-3.219 (0.005)***
<b>marketing</b>	4.386 (0.003)***	3.727 (0.000)***	<b>marketing</b>	3.649 (0.001)***	3.746 (0.005)***
<b>price</b>	-0.476 -0.12	-0.35 -0.143	<b>price</b>	-0.731 (0.001)***	-0.928 (0.001)***
<b>coffee_h</b>	-0.081 (0.024)**	-0.104 (0.000)***	<b>coffee_h</b>	-0.074 (0.016)**	
<b>educ</b>	0.023 -0.783		<b>educ</b>	0.133 (0.004)***	
<b>aw_e010</b>	-0.249 -0.847	-1.228 (0.028)**	<b>d_aw08</b>	-0.181 -0.315	-0.608 (0.001)***
<b>aw_e1020</b>	-0.347 -0.818	-1.506 (0.017)**	<b>d_aw15</b>	-0.014 -0.939	-0.448 (0.024)**
<b>aw_e2030</b>	-0.482 -0.713	-1.484 (0.008)***	<b>d_aw30</b>	-0.245 -0.1	-0.358 (0.063)*
<b>aw_e4050</b>	-0.197 -0.847	-0.976 (0.027)**	<b>d_aw30100</b>	-0.17 -0.45	-0.726 (0.001)***
<b>aw_e50100</b>	0.328 -0.247	0.159 -0.341			
<b>d_2004</b>	-0.221 (0.040)**	-0.194 (0.036)**	<b>d_2004</b>	-0.249 (0.005)***	-0.277 (0.011)**
<b>Constant</b>	0.27 -0.89	1.61 (0.010)***	<b>Constant</b>	-1.193 (0.020)**	0.27 -0.257
<b>Observations</b>	26	26	<b>Observations</b>	26	26
<b>R-squared</b>	0.982	0.981	<b>R-squared</b>	0.981	0.938
<b>AIC</b>	-28.95545	-31.1003	<b>AIC</b>	-29.82919	-4.714788
<b>BIC</b>	-8.825902	-13.48695	<b>BIC</b>	-10.95774	10.38237

test d\_aw08=d\_aw15=d\_aw30=d\_aw30100

on Dummies\_2

F( 3, 14) = 2.42

Prob > F = 0.1094

(we reject the hypothesis of the irrelevance of this categorization at a 11% level of significance)

d\_aw08: Austria, Denmark, Germany, Italy

d\_aw15: Finland, The Netherlands, Norway

d\_aw24: Switzerland, UK

d\_aw30: France, Ireland

d\_aw30100: Belgium, Sweden

test aw\_e010= aw\_e1020= aw\_e2030= aw\_e4050

=aw\_e50100 on Dummies\_4

F( 4, 12) = 5.53

Prob > F = 0.0092

(we reject the hypothesis of the irrelevance of this categorization at a 1% level of significance)

**Table 12: Probit regressions to find determinants of awareness level and awareness increase**

<b>Awareness level</b>				<b>Awareness increase</b>		
	Probit_1	Probit_2	Probit_3		Probit_4	Probit_5
	d_aw42	d_aw42	d_aw42		d_aw24100	d_aw24100
<b>supermkts</b>	-3.036 (0.099)*	-2.457 -0.145	90.319 (0.036)**	supermkts	-11.491 (0.067)*	-10.899 (0.051)*
<b>wshops</b>	263.215 -0.131	86.291 (0.043)**		wshops	-11.864 -0.793	
<b>vol</b>	-5.457 -0.229			marketing	5.336 -0.651	
<b>educ</b>	1.645 (0.036)**	1.135 (0.029)**	0.802 (0.052)*	ft_products	-0.17 -0.175	-0.131 -0.16
<b>d_2004</b>	2.506 (0.054)*	1.84 (0.020)**	1.645 (0.025)**	d_2004	1.273 -0.209	1.026 -0.211
<b>Constant</b>	-22.236 (0.033)**	-15.674 (0.020)**	-12.003 (0.031)**	Constant	1.67 (0.072)*	1.566 (0.055)*
<b>Observations</b>	26	26	26	Observations	26	26

**Table 13: Treatment regression to observe direct and indirect effects through awareness level**

	<b>Awareness level</b>					
	Treatment_4		Treatment_5		Treatment_6	
	mktshare	d_aw42	mktshare	d_aw42	mktshare	d_aw42
<b>supermks</b>	0.852 (0.029)**		1.085 (0.001)***		1.388 (0.000)***	
<b>wshops</b>	14.851 -0.105	90.319 (0.036)**	10.173 -0.106	90.319 (0.036)**	5.465 -0.395	90.319 (0.036)**
<b>vol</b>	0.782 -0.325		0.735 -0.312			
<b>vol_2</b>	-1.68 (0.064)*		-1.65 (0.050)*			
<b>marketing</b>	5.93 (0.000)***		6.383 (0.000)***		5.916 (0.000)***	
<b>price</b>	-0.34 -0.149					
<b>coffee_h</b>	-0.091 (0.000)***		-0.109 (0.000)***		-0.126 (0.000)***	
<b>educ</b>	0.077 -0.435	0.802 (0.052)*		0.802 (0.052)*		0.802 (0.052)*
<b>d_2004</b>	-0.159 -0.372	1.645 (0.025)**	-0.262 (0.055)*	1.645 (0.025)**	-0.221 -0.12	1.645 (0.025)**
<b>d_aw42</b>	0.627 -0.121		0.875 (0.001)***		0.749 (0.007)***	
<b>Constant</b>	-0.34 -0.775	-12.003 (0.031)**	0.564 (0.000)***	-12.003 (0.031)**	0.681 (0.000)***	-12.003 (0.031)**
<b>Observations</b>	26	26	26	26	26	26
<b>rho</b>	-0.52423		-0.88303		-0.50346	
<b>sigma</b>	0.2036785		0.23997881		0.2541844	
<b>lambda .2283871</b>	-0.10677455		-0.21190761		-0.12797138	

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## **INTERNET SITES**

### **Fair trade organizations:**

[www.eftafairtrade.org](http://www.eftafairtrade.org)

[www.fairtrade.net](http://www.fairtrade.net)

[www.ifat.org](http://www.ifat.org)

[www.worldshops.org](http://www.worldshops.org)

[www.fairtrade.org.uk](http://www.fairtrade.org.uk)

[www.maxhavelaar.ch](http://www.maxhavelaar.ch)

### **Others:**

[www.ico.org](http://www.ico.org)

[www.europa.eu.int](http://www.europa.eu.int)

[www.oecd.org](http://www.oecd.org)

[www.worldbank.org](http://www.worldbank.org)

[www.starbucks.com](http://www.starbucks.com)

[www.utzkapeh.org](http://www.utzkapeh.org)

[www.sustainable-coffee.net](http://www.sustainable-coffee.net)



