Market Disintermediation and Producer Value Capture: The Case of Fair Trade Coffee in Nicaragua, Peru and Guatemala

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Does participation in Fair Trade coffee marketing deliver added value to small-scale producers? The answer to this question is critical to at least two stakeholder groups. The answer is meaningful for small-scale producers whose livelihoods and well-being are affected by their adherence to the certification norms that make them eligible for participation in Fair Trade's cooperative pricing schemes. The answer is also crucial for the continued credibility of the value proposition that differentiates Fair Trade products in the consumer marketplace of developed countries. And thus it is of interest to consumers of fairly traded products and to the retailers who offer them (Grolleau and BenAbid 2001; The Economist 2006).

Transfair USA was awarded a grant by the Tinker Foundation in the year 2003 to study the impact of Fair Trade (FT) practices on coffee producers with small productive units in the Latin American region. The Agribusiness program at the University of Nebraska initiated the study under agreement with Transfair USA. The study was implemented in 2004-2005. Three countries with significant Fair Trade marketing to through Transfair, USA were selected for the study: Nicaragua, Peru and Guatemala. The study attempts to document in each country significant differences between FT and non-FT coffee producers presently engaged in coffee production as a result of differences

in producer prices of coffee paid to FT and non-FT producers, regarding selected aspects of coffee production, investment and savings practices, housing quality, opportunities for social and economic improvement, educational attainment and health status.

Method

We chose a survey methodology designed to measure a combination of fairly standard socio-economic indicators as well as measures particular to the FT coffee growing and marketing experience for this study. The reason for this choice is that we believe key audiences (e.g. international funding agencies) more easily accept the generalizability of the results of this type of study than those produced through ethnographic techniques, case study methodologies, and journalistic reports that predominate in the existing literature on the impact of Fair Trade (MacDonald 2006; Parrish, Luzadis and Bentley 2005; Raynolds, Murray and Taylor 2004).

The population under study includes coffee producers and their families whose productive units are small and are thus FT certifiable (1-3 hectares of coffee production per adult, over the age of 18 living in the household) who are currently producing coffee in traditional coffee areas under homogeneous environmental and social conditions. The two types of farmers surveyed include Fair Trade certified farmers, who meet the additional criteria of at least three years of participation in Fair Trade coops and sales of 30% of their production to Fair Trade cooperative buyers, and non Fair Trade independent farmers.

We drew stratified random cluster samples from the specified target populations in the three countries. On the assumption that cooperative size might affect the impact of

FT participations, coops were stratified by size, and comparative communities were selected through adjacency sampling. Cooperative areas were selected at random, and cooperatives, and then farmers within the coops and adjacent communities were selected at random as well. Farmers within the FT network were selected using random number procedures applied to cooperative census data. Non-participating farmers were generally selected using random walk procedures, subject to strictures of local geography and infrastructure development. While we cannot claim sample selection matches ideals outlined in methodological textbooks, we feel certain that standard sources of systematic error have been minimized if not eliminated. All in all we questioned about 1200 household heads in the three countries two-thirds of whom were FT participants.

Moises Léon an independent consultant from Costa Rica supervised all fieldwork, and in collaboration with Christopher Bacon in Nicaragua. He worked with a knowledgeable local counterpart in each country with whom he trained, the interviewers and the questionnaire coding team. In effect we kept costs down and made sure that most survey money made its way back into the local economy insofar as local workers did the bulk of the fieldwork. Obtaining clearance to conduct fieldwork, identifying appropriate cooperative partners, recruitment of staff, training, survey execution, control, coding, and shipping of documents to the US were among the complex tasks involved in completing the studies and account for the lengthy period of time devoted to the study. In reality, this was an ambitious research project to undertake in a developing country context. In the US, Alejandro Plastina, a doctoral candidate in statistics and agricultural economics performed the lion's share of the data analysis tasks given the complexity of the later. Good relationships between field staff, Transfair headquarters in Oakland and the

universities of Nebraska and subsequently Arizona, contributed to the collegial atmosphere in which the work was conducted. Patience and goodwill was demanded from all.

Findings

The country studies provide specific empirical results of the survey. Each includes an executive summary, detailed discussion of results, and technical appendices containing the statistical analyses and the raw data. Demographic indicators like household size suggest we were comparing similar units between the FT and non-FT groups. That is we were comparing comparable households. Results from all three countries indicate significant differences in indicators between Fair Trade and non-Fair Trade farmers in the predicted direction. In other words, in each of the domains of impact, significant positive differences for Fair Trade participating farmers have been detected. We report just a few highlights here. We have not pooled the data across countries because pooling the data and running new analyses (considering each location as a random variable) will not change the overall results. It would add some complexity to the analysis. Even if it might add some robustness to the conclusions (in the sense that they can be generalized to all Fair Trade producers if location is random), it will not really change the overall conclusions drawn in the country reports, and here below.

FT households generally report selling more coffee and receiving higher prices and incomes than non-FT households, although small coop member's incomes lagged in Nicaragua. In Peru FT participants sold more and received higher prices for coffee than non-participants. Interestingly, in Nicaragua, analysis including only women from FT coops shows that women claim significantly higher prices than men for two types of

coffee, and women achieved price parity elsewhere. Similarly in Guatemala, FT members sold more coffee, and earned more than non-members. However, between 2005 and 2004, non-members claim to have experienced a greater increase in their coffee incomes than FT coop members. Market prices may be aligning with Fairtrade prices in this country. In Guatemala, a female FT coop member has a greater probability of benefiting from better prices for her coffee than a male non-member although she may not receive prices equivalent to her male FT coop compadre.

Across countries, FT participants have in some cases made greater investments in land, tools, sheds, depulpers and livestock than non-members, but the differences tend to be small and often are not significant.

Household level impacts are variable across countries and across groups, sometimes large, sometimes not so large. In Nicaragua everyone's home has a dirt floor; in Guatemala, most FT participants homes have cement or tile floors in contrast to the dirt floors of non-members. In Nicaragua, a slightly higher proportion of Fair Trade coop members compared to non-members have pure drinking water directly available. In Peru, the proportion of non-participants whose drinking water comes from an unprotected source is almost three times higher than the corresponding proportion of FT coop participants. Access to water through a potable communal water source is by far the most frequent source of water reported among FT coop members in Guatemala.· In Peru, twice as many participants have added a room to their house in the past three years as non-participants, although only a quarter of respondents have done so. Guatemalan FT members are also more likely to have added a room than non-members. This indicator differs from the Nicaraguan case where no such difference was reported. In Guatemala,

FT households generally have access to electricity as is not true elsewhere, and not true of non-participating households in Guatemala (74% vs. 43%). In Nicaragua as in Guatemala, while few have purchased new TVs in the last three years, more FT members than non-members have done so.

In Nicaragua, a higher proportion of FT coop members enjoy basic literacy than in the non-members group but we found no difference in school attendance of children across all age categories by gender. In Peru, for all categories of educational attainment except university attendance, FT participation is not a significant predicator of attainment. FT coop member households have higher reported levels of educational attainment and aspiration than non-member households in Guatemala; indeed their attainment is higher than in other countries.

In Nicaragua, across illness categories such as colds and fevers or diarrhea a higher percentage of ill children received medical treatment in the FT members group than in the non-members group. Other differences may not have been significant. Similarly, in Peru, a higher percentage of TF members than of non-members have received medical attention for colds and fevers and statistical tests suggest different patterns of illness, with the FT coop participants suffering somewhat less. In Guatemala, across all classes of illness FT coop members report lower incidents of disease in their households, and higher use of professional health services than non-FT coop members.

Farmers generally report positive impacts of participation in Fair Trade coops on technical and social indicators across countries. FT coop members also report higher levels of social participation than non-members except in Peru where respondents report

they are active in local affairs. In no country do many non-participating farmers report receiving much technical or social assistance from local government services.

In Peru, FT participants claim that their overall welfare has not improved over the past three years, however non-FT participants indicate that their welfare has worsened. Thus more FT participants claim to be holding their own. By contrast, in Nicaragua, members of the FT group have a more positive outlook on the future for themselves and their children and claim their incomes have improved over the last three years than do non-members. More than a quarter of Guatemalan FT coop members indicated that they were better off compared to their situation three years earlier, but less than on-sixth of non-members concurred. Still, the proportion of members that expect the wellbeing of their children to be worse than theirs is significantly higher than the corresponding proportion of non-members in Guatemala.

In terms of agriculturally sustainable practices in Nicaragua, a higher, statistically significant proportion of FT members claim to have increased shade grown coffee production over the last three years than non-FT members. This pattern was not repeated elsewhere but organic fertilizer use, sustainable practices with crop residue was higher among Guatemalan FT participants than non-participants. Across groups in Guatemala, more than 50 % claim to have increased the share of shade-grown coffee they grow during the past three years. In Peru about 40% of both groups have increased their production of shade grown coffee and none has increased production of non-shade grown coffee.

Discussion

One thing that inspires confidence in the data, even if it suggests the wisdom of modesty in claims made about the local impacts of Fair Trade s that it does not portray FT participation as a panacea or a utopian solution to the problems of farming households in developing countries in Latin America. The results are more mixed. Across countries, there is no doubt that FT participating farmers are better paid for their coffee than non-participating farmers. But in Guatemala for example, some FT farmers claim that FT prices have stagnated relative to those paid by private buyers. In addition, some indicators of wellbeing are little different between FT and non-FT farmers. For example, very few people in our sample admitted to having any monetary savings of note or a bank account of any kind. And most people enjoyed limited access to health care even if FT participating farmers enjoyed a little more access than non-participating farmers. Thus, one can conclude that participation in Fair Trade is like a life jacket, a shock absorber, or a buffer against the effects of the volatility global market capitalism visits on the poor in developing countries. It is a safety net, but given current pricing levels, production regimes, and farm sizes, Fair Trade coffee alone is not THE solution to the problems of the poor.

The results of this study should be interpreted with some care. First, the stratification sampling procedure we used is the way to go with this type of survey, especially where we had lists of all associated member producers. But the probability of inclusion of each observation collected varies depending on the actual procedure followed at each step of the sampling procedure. And it is very difficult to control the sampling procedure followed at the level of individual interviewers' choices made in the field. Thus, if our assumptions about the sampling procedures followed in each location

and by each interviewer differ from the ones actually used, our results may be somewhat biased (no a-priori direction proposed).

Second, this is a cross-sectional study, meaning it is a snapshot frozen in time. As such it contains little meaningful trend data. In other words, informants' self-reports of trends should be treated as opinion data, rather than veridical claims about the direction of change in FT and non-FT affiliated communities. Trends can only be assessed by the comparison of data collected in this study with comparable data collected at later points in time and through similar means in the three countries. Third, in general the results represent correlational measures rather than causal measures. In other words, if we state that FT farmers express greater optimism about the future than non-FT farmers we cannot conclude that FT membership causes greater optimism, only that greater optimism is associated with membership in FT coffee marketing schemes. The data do not allow us to exclude other possible reasons for this greater optimism; it may be that farmers with sunnier dispositions are disproportionately inclined to participate in FT schemes. Similarly, if we show that FT farmers enjoy greater access to electricity or piped water, we cannot conclude from this data that this was due to investments by FT coops or FT farmers themselves due to their higher incomes. They may have enjoyed better access prior to joining the FT movement, or local government may have provided these services for reasons unrelated to Fair Trade. That being said, a consistent pattern of favorable results does suggest that FT participation and wellbeing are somehow related and all things being equal, FT participation is generally in farmers' best interests.

A final limitation of this study is that it applies only to fairly-traded coffee and only to the Latin American experience, and only to fair-trade coffee sourced by Transfair,

USA. We cannot extrapolate these results to other fairly traded agricultural commodities such as tea, sugar, and bananas, and we cannot extrapolate the results to experiences in Africa or South Asia, or to experiences of other Fair Trade organizations, for instance. We have no reason to doubt the results would be similar in other Fair Trade market channels, but we have to refuse commentary about other situations elsewhere in the world.

In the aftermath of this descriptive study, future data collection should be structured around particular hypotheses to be tested. For example, if one was interested in producer incomes or in adherence to sustainable agricultural practices, then one could collect income and agricultural practice data and see how these were related to Fair Trade participation and data collected on the type of coffee produced, regime under which is grown (shaded area/non-shaded), fertilizer use, irrigation, highest level of education within the household, prices received, volume sold, etc.

Some specific lessons learned might guide future data collection as well. Our interviewers were somewhat opportunistic in their choice of who to interview within each household. We would recommend that interviews be taken only from the producer in charge of the family and in charge of the coffee production. One probably should not ask producers to comment rertrospectively about average yields, volumes, prices, or income. Most people do not know how to assess an average measure. In the future, although quality of life measures are widely used, it might be advisable to avoid collecting data on producers' perceptions about their future, since this is such a subjective measure. Further, it might be advisable to reduce the number of questions about health status. For example, it might be better to ask how many family members have been sick with (list of

diseases) during the last year? Ask if there was a need for medical attention? Ask, if they were able to obtain medical attention? And if not, ask for an explanation, for example, could not afford it, no physicians in the area, etc. Similar simplification to questions about education might also be proposed.

Conclusion

Results from a three-country survey of the effects of the market channel disintermediation, and the effort to transfer of value up the value chain to producers via price supports shows that producers participating in Transfair-supported Fair Trade cooperatives are indeed capturing more value than non-participants. These survey based results are consistent with case study results reported from Mexico, Guatemala and El Salvador (Bacon 2005; Raynolds, Murray and Taylor 2004; Taylor, Murray and Raynolds 2005)This transfer translates into very modest but measurable improvements in quality of life, health, education, material comforts, social participation, technical and social assistance, and even participation in sustainable agricultural practices. This means that producers may be assured that participation in Fairtrade schemes is a good idea for them. It means that consumers who self-tax in order to transfer value to producers can have confidence that the scheme works as promoted. They are participating in a fairly represented ethical retailing program. Finally, it means that roasters, coffee houses and other retailers may be assured that they can defend the position that by agreeing to sell Fairtrade coffee they are participating in a social change campaign that delivers concrete benefits to small-scale producers in developing countries in Latin America as claimed.

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