AN EMPIRICAL STUDY ON FAIR TRADE:
HOW EFFECTIVE IS IT ON EXPORT VALUES?

A Master's Thesis

by
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Ankara
September 2013

To Nejat,

you know when something is unique and can be forever.

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Graduate School of Economics and Social Sciences
of
İhsan Doğramacı Bilkent University

by

ELİF KUYUCU

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I certify that I have read this thesis and have found that it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts in Economics.

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ABSTRACT

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September 2013

This thesis analyzes an ambitious attempt in the history of trade, Fair Trade --an initiative that aims at benefiting producers from developing countries through setting minimum prices, paying producer premiums, allowing them to enter developed markets, and taking measures for improving productivity. Although Fair Trade is of increasing importance in both practical and academic areas, the current study is the first one that formally studies its effects. This thesis studies empirically, using a unique dataset, whether participation in Fair Trade helps countries increase their agricultural exports. The empirical results show that the effect exists only in some cases: participation in Fair Trade can be associated with an increase in the agricultural exports of middle-income and Latin American countries, but not of other participating countries. Such a differential effect might be attributed to Latin American countries' importance in Fair Trade products, Fair Trade products'

importance to Latin American countries' exports, and differences in countries' absorptive capacities.

ÖZET

AMPİRİK BİR ÇALIŞMA:

ADİL TİCARET İHRACAT DEĞERLERİ ÜZERİNDE NE KADAR ETKİLİ?

Kuyucu, Elif

M.A., İktisat Bölümü

Tez Yöneticisi: Dr. Banu Demir Pakel

Eylül 2013

Bu çalışmada, gelişmekte olan ülkelerdeki tarım üreticilerini taban fiyat koymak ve üretici primi ödemek gibi araçlarla iyileştirmeyi ve ürünlerini gelişmiş ülke pazarlarına sokmayı amaçlayan bir girişim ve uluslararası ticaret tarihinde kararlı bir deneme olan Adil Ticaret incelenmektedir. Adil Ticaret'in hem pratik hem de akademik alanlar için artan bir öneme sahip olmasına rağmen, bu tez onun etkilerini resmen inceleyen ilk çalışmalardan biridir. Bu çalışmada özgün bir veri seti kullanılarak, ampirik yöntemlerle Adil Ticaret'e katılımla ülkelerin yıllık tarımsal ihracat değer ve miktarlarının nasıl değiştiği incelenmektedir. Bu anlamda olumlu bir etki beklenmiş olmasına rağmen, ampirik sonuçlar bu etkinin sadece bazı durumlarda ortaya çıktığını tespit etmiştir: Adil Ticaret katılımı orta gelir grubu ülkelerde ve Latin Amerika ülkelerinde bir ihracat artışıyla ilişkilendirilebilmektedir. Latin Amerika ülkelerinin Adil Ticaret'e verdiği önem, Adil Ticaret ürünlerinde

dünyada önemli üreticiler ve ihracatçılar olmaları ve dolayısıyla Adil Ticaret'in bu ülkeler için daha fazla önem teşkil etmesi bu şekilde farklılaşan bir etkinin oluşmasını açıklayabilmektedir. Ayrıca bu sonuçların ülkelerin massetme kapasitelerindeki değişikliklerle ilişkilendirilebileceği düşünülmektedir.

Anahtar Kelimeler: Uluslararası Ticaret, Gelişme Ekonomisi, Adil Ticaret, Gelişmekte Olan Ülkeler, Latin Amerika, Orta Gelir Grubu Ülkeler, Özümseme Kapasitesi

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

Although it may easily be confused with a "fair" interpretation of trade, Fair Trade henceforth is claimed to be a response to the failure of conventional trade in developing agriculture in the world's poorest countries and improving the sustainability of livelihoods of local farmers. It is believed that trade can help poverty alleviation, but only if it is managed to do so. To this extent, Fair Trade aims to benefit world's poorest producers' through standards and better pricing conditions. In the words of Fair Trade International (FLO), the main body for setting and maintaining standards, Fair Trade is:

> *"... 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 the rights of, marginalized producers and workers – especially in the South."*

Fair Trade framework is maintained through two distinct sets of standards. The first group applies to smallholders that are working together with co-operatives or other organizations in a democratic structure. The other set applies to workers

whose employers pay decent wages, guarantee the right to join trade unions, ensure health and safety standards, and provide adequate housing where relevant (Fair Trade International, 2012). These standards are attained through certification organizations throughout the world, which ensure the compliance. The whole licensing system is denoted as Fairtrade and behind this procedure there are Fairtrade labeling initiatives, Fairtrade producer networks and Fairtrade marketing organizations.

All Fair Trade standards are totally published and available on the FLO website, which deal with issues such as production, environmental protection, labor conditions, development potential, democracy, transparency and participation, and nondiscrimination (of color, race, sex, origin etc.). Hence from the view point of consumers, this certification procedure also brings a safety of knowing what they buy, a moral obligation to pay decent prices for goods produced with decent conditions. In this manner, ethical concerns are attached to Fair Trade production the eyes of consumers. Here it should also be mentioned that standards are separately organized for over 300 raw products, which are sold around more than 120 countries with the Fair Trade mark and being updated very often (Fair Trade International, 2012).

The most powerful tools that FLO uses to satisfy its goals are Fairtrade minimum prices and Fairtrade Premium. Minimum pricing mechanism works as follows: FLO offers minimum prices to producers meeting their standards and prices differ for each class of product and for each country, and these prices are often higher than the market price. Hence it works as if a price floor is imposed. In those cases where market price is higher, consumers pay the market price as the price floor would not be binding in such a case. In this paper, it will be analyzed how Fair Trade products with prices higher than market prices affect the participant countries' export

volumes. Fairtrade Premium is an amount determined per sale that goes to a communal fund for workers and the way it is spent is decided by producers themselves. This Premium may be spent to education, healthcare, farm improvements or processing facilities. An analysis of Fairtrade Premium expenditure indicates that small producer organizations have increasingly invested in their businesses and processing improvements for their members, -53% invested in improvements to quality or productivity or in organizational development in 2011-12- (Fair Trade International, 2013). For many organizations it has also been a practice to distribute Fairtrade Premium as direct payments to members. This ensures member commitment, particularly in coffee market, considering that it has a high market price (Fairtrade Labelling Organizations International, 2012).

Fairtrade Premium is associated with a quality enhancing process and knowledge transfer. It indicates a developmental effect of Fair Trade, which implies more than just allowing developing countries to penetrate into developed markets. Estimated Fairtrade Premium paid by FLO to all producer organizations were over €65 million in 2011 and over €80 million in 2012, nearly 16 times the amount of Fair Trade products sold (Fair Trade International, 2013).

Although it dates back to co-operative movements in late nineteenth century and more recently to the rise of Alternative Trading Organizations (ATOs) in 1940s, Fair Trade began to expand and became a movement in 1960s (Moore, 2004). In 2011, the annual sales of Fair Trade products were around €4.9 billion, produced by over 1.2 million farmers and workers in 66 countries. This represents a 12% increase in annual sales on annual basis, and a 44% increase relative to its level in 2009 (Fair Trade International, 2012). In 2012, the number of participants increased to over 1.3

million farmers in 70 countries with a total of 1149 Fairtrade producer organizations, whose products are sold in 125 countries around the world. Today, more than half of bananas sold in Switzerland and over 40% of bagged sugar in UK carries the Fair Trade mark (Fair Trade International, 2013). For the very first time, Fair Trade appeared on the Economic Forum's official programme in September 2012, held in Krynica, Poland. Fair Trade organization is united in the "Fair Trade Beyond 2015" campaign that aims to encourage town leaders and Civil Society Organizations across the globe to call on world leaders to put in place a new global development framework beyond 2015, pushing for Fair Trade to be part of the UN development goals and making it a universal norm (Fair Trade Beyond 2015 Campaign). Hence, the increasing importance of Fair Trade to policy-makers, as well as practical and academic knowledge stems from these facts.

Fair Trade still accounts for a small share in global trade transactions. However, when we think about the countries participating in Fair Trade, it is the case that Fair Trade products constitute a significant part of their foreign trade. This inspires the research question I am posing. Fair Trade aims at improving producer welfare through direct channels such as minimum prices and Fairtrade Premium. However, there can also be an indirect channel for country-level welfare improvement through increased exports, and increased preference for values because of aforementioned quality enhancement, consumer perception and preference of Fair Trade products in the developed countries. If Fair Trade really focuses on benefiting the poorest countries of the world, does participation in Fair Trade increase the annual export values of those countries? I wish to observe an augmentation in export values of complying countries after moving to Fair Trade.

However, the analyses show that Fair Trade participation cannot be said to be benefiting all countries through such a channel, yet it is effective for some country groups. These groups are Latin American countries on regional basis and middle income countries when the same is examined for income groups[1]. One explanation for this diversity in results is that Fair Trade has a small share in global trade. In 2011, sales through Fair Trade comprise only 0.04% of global trade of its six core products, which are banana, cane sugar, coffee, cocoa, seed cotton and tea[2]. This prevents Fair Trade to have an important impact when it is looked at the global picture. The second possible explanation is that this result is based on countries' technological and operational investments after Fair Trade and their successes in internalizing those investments. When numbers are considered, average yearly Fair Trade Premium received by producer organizations is €80,000 on average and this implies €55 on average per farmer or worker depending on the type of contract with producer organization. This amount is €150 on average for a farmer or worker in Latin America and the Caribbean and €100 for Central America. Northern Africa, Southern Africa and Middle East are nearly equal to the average amount, whereas all the Asian regions and the rest of Africa are below average Fairtrade Premium rate (Fairtrade Labelling Organizations International, 2012). Hence not each member of the Fair Trade network receives the same amount of ability to develop.

Furthermore, another point to be mentioned is the different absorptive capacities of different countries. Absorptive capacity is handled as a factor in development economics which affects the realization of knowledge transfers. The

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[1] Henceforth, when Latin America is mentioned, it will imply Central and South American and Carribbean countries.
[2] Author's own calculation using UN COMTRADE data set.

concept of absorptive capacity was introduced by Cohen & Levinthal (1990) at the firm level as the ability to recognize the value of new, external information, to assimilate it, and to apply it. For some countries with less ability to implement knowledge, with inadequate background and infrastructure, effectiveness of knowledge transfers may be less than expected. Hence it is seen that not all country groups are reflecting the positive effect that is expected in the beginning of this research, or at least some of them reflect less depending on some arguable factors. These points will be touched upon again in following sections, when interpreting the empirical results.

This research question is interesting from both international trade and development economics perspectives. Fair Trade standards are set to improve product quality, and Premium is spent on training farmers, improving farms, etc. Research by CEval, the German Center for Evaluation, looked at Fair Trade's impact on poverty reduction, comparing Fairtrade-certified producer organizations with non-certified farmers for six different products and regions. While results varied between the cases, the study confirmed that small-scale farmers in Fair Trade enjoyed slightly higher and more stable income than producers in the comparison group (Fair Trade International, 2013). So, Fair Trade policies, if successful, should be expected to improve product quality, raise market prices and incomes. As a result, terms of trade of a country, who relies heavily on exports of Fair Trade products, might improve after adopting the standards, and the country might enjoy greater welfare.

Given the growth of sales and Fair Trade network, Fair Trade is of increasing importance. This topic has not attracted much attention in economics literature. However, it has been studied extensively in the political science literature.

As the literature review and existing studies put forward, there are lots of questions to be asked. This study can be seen as the first attempt towards a literature on Fair Trade. The fact that this issue has not been treated formally in economics literature makes the proposed study an ambitious one.

The study is structured as follow: The next chapter overviews the literature on trade liberalization, Fair Trade and absorptive capacity. The third chapter leans on explaining the characteristics of data and the empirical strategy used in analyses. This chapter gives descriptive information about Fair Trade data set in hand which helps to perceive the study more realistic. In the fourth section, results are shown and interpreted. The same section includes some robustness measures to strengthen the findings. The last section briefly summarizes and concludes.

CHAPTER II

LITERATURE REVIEW

It is known that the poorest and least-developed countries (LDC) of the world are still agrarian societies; they mainly depend on agricultural production to survive and sustain their economies. "In 2004, 69 per cent of the economically active population was employed in the agricultural sector in the LDCs." (UNCTAD, 2008). This is the main motivation behind this paper to go after an agricultural trade-related measure. Agriculture has an important place in global trading activities too. According to World Trade Organization (WTO), as of 2011, the share of agricultural products in world primary products trade is 31% (WTO, 2011). Nevertheless, urbanization and deagrarianization, as making a living in agriculture gets harder and harder, are two important problems that are being emphasized by social and rural development studies. The agricultural trade balances of developing and least-developed countries have worsened particularly strongly since the mid-1990s, as a high number of producers have found it difficult to compete in their own markets for many key foodstuffs following trade liberalization (UNCTAD, 2008).

There has been a debate going on about developing countries and neoliberal trading policies in the existing literature. On one hand, trade liberalization allow

developing countries to enter new markets by tariff reductions and removals of trade barriers. Standardization processes ensure quality management and competitiveness with other markets. Trade liberalization is also said to bring technological improvements to developing countries. However, that is only one side of the coin. Many studies are aware of the dilemmas created by neoliberal restructuring in agriculture: Bad implementations of deregulatory decisions and adapting policies written in bilateral and multilateral trade agreements shrink developing countries' self-determination and development space (Wade, 2003). Recommended expansion to global markets are far from being realistic in terms of farmers' inability in knowledge, time, expertise and financial resources (Aydin, 2010). Opening to trade, by raising import demand more than exports and with consequent balance of trade problems, may reduce growth below what might otherwise have happened (Santos-Paulino & Thirlwall, 2004). Nevertheless, the main winners in terms of welfare are suggested to be developed countries that reduce their own distorting support[3] (Bouët, Bureau, Decreux, & Jean, 2005).

Agreement on Agriculture (AoA) of World Trade Organization, valid from January 1, 1995, suggested developing countries to transform their non-tariff barriers into tariffs and gradually reduce the amounts of those. This easier access of developed countries to new markets have been presented in a fancier package to developing countries, with the justification that lower tariffs are expected to enhance food security as a result of lower prices. A study conducted by Diao, Somwaru & Roe (2001) shows that in the post-AoA period, if we eliminate, all worldwide tariffs

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[3] Overall Trade-Distorting Domestic Support (OTDS) is used to symbolize sum of all domestic agricultural supports to producers. These are creating externalities for domestic markets and hence harming international trade.

(and tariff equivalents) on agricultural imports, export subsidies and domestic support, the results suggest that the index of world agricultural prices would rise by 11.6 percent relative to the level of world nonagricultural prices. And 80% of this price increase comes from the libaralization in developed world itself. However, AoA has been critiized for not being an effective tool in world-wide agricultural trade liberalization and protectionist measures on agricultural commodities were observed to pertain, especially in the developed countries.

The inability to achieve the fair and market oriented agricultural trading system, as aimed by WTO, ended up in a renegotiation period, also known as the Doha Round. During these meetings, certain exceptions were brought into use of developing countries. These took the form of more modest tariff cuts (2/3 of the tariff cuts in developed countries), exception on market access for special products on grounds of food security and rural development and more. In general, these flexibilities for developing countries are to ensure that livelihoods and food security are not threatened as a result of foreign competition because there will be an expected increase in prices of exported agricultural commodities. These measures may help to achieve a fair, market oriented trading system in the long term. However in the short term, there are still shortfalls of these suggestions, as the food importing countries of Africa may not be able to afford the higher food prices (Hailu, 2010). Furthermore, these compensational promises to Net Food-Importing Developing Countries (NFIDCs) are said to be never implemented properly (Oxfam International, 2005).

In general, goals of Doha Development Round, started in Doha, Qatar in 2001 with a ministerial-level meeting, can be summarized in three pillars. The first one of

these is the abovementioned changes in tariffs. Other pillars are supressions in export subsidies and cuts in trade-distorting domestic supports. The major reason behind the setting up this Round was that Agreement on Agriculture and GATT procedures were now considered to be ineffective in agricultural trade because most of the world economies were utilizing export subsidies and domestic supports (WTO, 2004). Aiming to synchronize agricultural trading into a multilateral system, Doha Round is still in progress.

During its more or less fifty years of history, Fair Trade concept can be said to have transformed from an ethical concern into an institutionalized international market system (Jaffee, 2011). So it can be seen as a powerful tool to offer in response to rising criticisms towards free trade, at least compared to other Alternative Trading Organizations.

Fair Trade's 50 years of history is moving hand in hand with a growing literature, unfortunately with one that lacks the essential aspect of a formal theoretical framework. What is common is the qualitative research. The first sound paper on the subject depicts Fair Trade as an alternative to the hegemony of free trade (Barratt Brown, 1993). Hayes (2006) uses a Marshallian partial equilibrium model to place the 'local Fair Trade organization' at the center of discussion. In contrast to Barratt Brown, to study allocative efficiency under Fair Trade, it is studied against the Pareto-optimal competitive benchmark using the standard tools of economic theory. Hayes concludes Fair Trade complements the market and should be an essential component of any free trade policy that is concerned with the welfare of the poor. Maseland & De Vaal (2002) answer an important question; is Fairtrade minimum pricing a market distortion? Using a Heckscher-Ohlin framework of

comparative advantage, they conclude that Fair Trade is superior to protectionism, but its extent depends on the price elasticity of the demand for the targeted product. When new trade theories are considered, using a static economic geography model, they find that Fair Trade always dominates free trade for it always leads to a higher real wage for all income groups in the poor region at any non-prohibitive level of transportation costs. The minimum pricing structure is not analyzed in this paper in direct indication to distortive effects. But it generates an extension to the paper's question that standing at above or below portion of such a price floor may change the magnitude of a country's affection form Fair Trade.

A paper on ATOs and how such movements help the poorest countries of the world to attain higher living standards, Leclair (2002), underpins the advantage of Fair Trade that assists specific groups. Aid programs generally tend to be spread all over the entire population but Fair Trade has a more specific target. Furthermore, ATO's marketing and sales promotions intend to increase the demand for those products and hence result in higher prices and higher quantities sold. Yet Fair Trade accounts for a small share of global trade, "… its continued expansion will result in rising living standards for at least a segment of population of the developing world." Another researcher, Sidwell (2008) advocates free trade as being the most efficient poverty reduction method. However, he critisizes Fair Trade on grounds that it does not promote economic development and holds back diversification. In a similar context, Smith (2009) accepts that Fair Trade may be retarding developmental change, yet he underlines that this organization has some generic norms of operation that compensate for some real world problems that producers face (market failures, information failure, lack of capital etc.) by reducing risk, uncertainty and alleviating

the capacity constraints. Although the empirical evidence shows that minimum pricing does not necessarily create quality enhancement and does not promote intensification, small attempts that matter for individual betterment are also important.

Knowledge transfers are not adequate in creating development by them alone, a good understanding and successful implementation are required for potential progress as well. Keller (1996) distinguishes between technological information and human capital as two forms of knowledge which are both required for sustained higher growth. Information allows the domestic country to benefit freely from an outward-orientated implication, such as Fair Trade in this case, because it is already an existing part of the implication. Though the complying part is human capital and it is costly, mainly because it is hard to accumulate and it has to be home-provided. Fair Trade participant countries may be differentiating when the ability to supply qualified human capital is considered. Although Fair Trade Premium is used for educational and developmental activities, the extent that existing human capital internalizes those activities may differ. In a paper on Ethiopia trying to meet the Millennium Development Goals of UN with foreign aid, the importance of accelerating education spending is listed as a priority since skilled labor with a lag – of education and capacity- is a binding constraint for absorptive capacity (Sundberg & Lofgren, 2006).

Nooteboom (2000) lists the factors that are detrimental for incremental innovation as lack of trust which enforces more legal contracting, raising transaction costs, a greater volatility of work, short-term labor contracts, high turnover of labor within the firm, as well as volatility of firm ownership and short-term profit

orientation, all may be hindering the development of durable relations within and between firms.

According to Castillo, Salem, & Guasch (2012), empirical evidence demonstrates that trade can contribute to overall domestic productivity growth only when the technology gap between domestic and foreign firms is not too large and when a sufficient absorptive capacity is available in domestic firms. They accept innovative and absorptive capacity of a country to be research, development and labor quality.

When looked at regional basis, Africa's agricultural research history over the past six decades draws lessons for strengthening national and regional agricultural research systems over the coming 30 years, mainly because of what can be called an absence of high absorptive capacity (Eicher, 1990). Farole & Winkler (2012) suggest that a lower technology gap, firm technology, firm size, proximity to other firms, and export behavior interact positively with foreign output share. Their empirical results show that intra-country productivity spillovers are present in the Latin American countries. Countries with R&D expenditure receive more productivity spillovers than those without R&D expenditure. Furthermore, technological progress is the major driver of productivity growth in the Latin American countries.

CHAPTER III

DATA AND EMPIRICAL STRATEGY

3.1   Data

This study employs Fair Trade International minimum price/Fairtrade Premium data set obtained from the organization itself on request. This data set contains all the pricing information for the period of 2005-2012, for all countries and all product specifications. However, not all products but six biggest and most important ones, namely banana, coffee, cocoa, cotton, sugar, tea will be the concern of the paper.[4] In 2011, these six products' sales were approximately 60% of all Fair Trade sales. They signify nearly 619,000 megatons of annual sales volume in 2011. Other than their impact for Fair Trade, these products have significance for consumers and producers in general, too. For example, after water, tea is the most popular drink in the world with consumption of 70,000 cups per second. On the other hand, banana is the fourth most important food staple in the world and the fifth most-traded agricultural commodity (after cereals, sugar, coffee and cocoa), generating billions of dollars. Though the majority of cocoa consumption occurs within the developed world, cocoa is grown in tropical regions of the developing world and

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[4] Figures in this paragraph come from Fair Trade International (2011)

more than 30 developing countries produce cocoa, supporting the livelihood of more than 14 million people. In some countries of West Africa and Latin America, cocoa production is the primary income stream. In Côte d'Ivoire and Ghana, 90% of the farmers rely on cocoa for their primary income. Similarly, coffee is a big business and remains one of the most valuable primary products in world trade. However, for many of the world's 25 million coffee farmers, coffee is a labor intensive crop that frequently yields very little financial return. Furthermore, cotton is an especially important source of employment and income within West and Central Africa, India, Pakistan, and Central Asia. There are 135 million tons of sugar produced each year from millions of farms and plantations in 127 countries around the world.

Table 1 gives information about the largest exporters of those products based on their export values among countries which participate in Fair Trade. The same information is provided in terms of export quantities in Table 2. It is seen that Brazil is the most prominent country which has Fair Trade producers for at least three core products. Combined with the existence of Côte d'Ivoire and Ecuador, they reflect the importance and activity of Latin America in Fair Trade.

Table 1. Largest exporters for core products among Fair Trade complying countries (in export values)

	2005	2006	2007	2008	2009	2010	2011
Banana	Ecuador	Ecuador	Ecuador	Ecuador	Ecuador	Ecuador	Ecuador
Cane Sugar	Brazil	Brazil	Brazil	Brazil	Brazil	Brazil	Brazil
Coffee	Côte d'Ivoire	Côte d'Ivoire	Côte d'Ivoire	Côte d'Ivoire	Côte d'Ivoire	Côte d'Ivoire	Côte d'Ivoire
Cocoa	Brazil	Brazil	Brazil	Brazil	Brazil	Brazil	Brazil
Seed cotton	Brazil	Burkina Faso	Brazil	Brazil	Brazil	Cote d'Ivoire	Brazil
Tea	-	-	-	Sri Lanka	Sri Lanka	Sri Lanka	Sri Lanka

Source: Author's data set from Fair Trade International and UN COMTRADE.

16

When Table 1 and Table 2 are compared a similar picture is observed, except of seed cotton and tea. For seed cotton, Brazil is a more important exporter when looked at export value data, but Burkina Faso is more effective in export quantities. Similarly, Sri Lanka is the most important exporter of tea when looked at export values but China can be seen as an important player in the ranking based on quantities as well. That may imply that for seed cotton and tea, differences resulting from exchange rate movements are affecting the exporters' position in those commodities' markets. However, other 4 products have more or less 'fixed' world prices that the rankings show no difference between values and quantities. For those 4 products, exchange rate differences may not be interpreted as factors affecting the pricing structure.

Table 2. Largest exporters for core products among Fair Trade complying countries (in quantities)

	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Banana	Ecuador	Ecuador	Ecuador	Ecuador	Ecuador	Ecuador	Ecuador
Cane Sugar	Brazil	Brazil	Brazil	Brazil	Brazil	Brazil	Brazil
Coffee	Côte d'Ivoire	Côte d'Ivoire	Côte d'Ivoire	Côte d'Ivoire	Côte d'Ivoire	Côte d'Ivoire	Côte d'Ivoire
Cocoa	Brazil	Brazil	Brazil	Brazil	Brazil	Brazil	Brazil
Seed cotton	Burkina Faso	Burkina Faso	Brazil	Cote d'Ivoire	Brazil	Cote d'Ivoire	Cote d'Ivoire
Tea	-	-	-	Sri Lanka	China	China	China

Source: Author's data set from Fair Trade International and UN COMTRADE.

Table 3 gives information about the largest producers of core Fair Trade products. The countries in this table may or may not be exporters or may or may not be participating in Fair Trade. This table is used to see whether important Fair Trade exporters, listed above, at the same time take place within important producers of those products or not. Table lists most important 2 producers of listed products for listed years based on annual production quantities. It is seen that Brazil for cane

sugar and China for tea are at the same time most important Fair Trade exporters and most important producers. However, this table also shows that, many of the important producers may not be participating in Fair Trade as well.

Table 3. Largest producers for core products (in quantities)

	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Banana	India Brazil	India Brazil	India China	India Philippines	India Philippines	India China	India China
Cane Sugar	Brazil India	Brazil India	Brazil India	Brazil India	Brazil India	Brazil India	Brazil India
Coffee	Brazil Viet Nam	Brazil Viet Nam	Brazil Viet Nam	Brazil Viet Nam	Brazil Viet Nam	Brazil Viet Nam	Brazil Viet Nam
Cocoa	Côte d'Ivoire Indonesia	Côte d'Ivoire Indonesia	Côte d'Ivoire Indonesia	Côte d'Ivoire Indonesia	Côte d'Ivoire Indonesia	Côte d'Ivoire Indonesia	Côte d'Ivoire Indonesia
Seed cotton	China USA	China India	China India	China India	China India	China India	China India
Tea	China India	China India	China India	China India	China India	China India	China India

Source: Author's data set from FAOSTAT, Food and Agriculture Organization of United Nations Statistics.

Another descriptive table takes the most important Fair Trade exporters based on export values and shows the importance of most heavily exported Fair Trade product among all exports[5]. In Table 4, percentages in parentheses are the ratios of the export values of those products to all exports of that country in that year. It is seen that Ecuador is the most important Fair Trade participant banana exporter and banana is Ecuador's a very important export product. Its nearly 90% of exports come from banana for 7 years. The most intriguing information comes from seed cotton. It is seen that except for 2006, seed cotton took less than 1% share in its most important

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[5] All exports signify total export value of chosen 6 core products.

exporters' overall exports. This is because there is a dramatic fall in Burkina Faso's seed cotton exports after 2006 and Brazil, where seed cotton takes a very small share in overall exports, becomes the most important exporter.

Table 4. Importance of products to largest Fair Trade producers' (in percentages of export values)

	2005	2006	2007	2008	2009	2010	2011
Banana	Ecuador (93%)	Ecuador (93%)	Ecuador (92%)	Ecuador (92%)	Ecuador (90%)	Ecuador (89%)	Ecuador (86%)
Cane Sugar	Brazil (53%)	Brazil (54%)	Brazil (51%)	Brazil (48%)	Brazil (54%)	Brazil (60%)	Brazil (55%)
Coffee	Côte d'Ivoire (84%)	Côte d'Ivoire (82%)	Côte d'Ivoire (81%)	Côte d'Ivoire (83%)	Côte d'Ivoire (87%)	Côte d'Ivoire (87%)	Côte d'Ivoire (91%)
Cocoa	Brazil (46%)	Brazil (45%)	Brazil (48%)	Brazil (51%)	Brazil (45%)	Brazil (39%)	Brazil (44%)
Seed cotton	Brazil (0.1%)	Burkina Faso (46%)	Brazil (0.1%)	Brazil (0.15%)	Brazil (0.28%)	Cote d'Ivoire (0.33%)	Brazil (0.08%)
Tea	-	-	-	Sri Lanka (99.8%)	Sri Lanka (99.5%)	Sri Lanka (99.7%)	Sri Lanka (99.8%)

Source: Author's data set from Fair Trade International and UN COMTRADE.

Fair Trade data set consists of information such as product type, product quality (conventional/organic farming), product form and characteristics (fresh/dried for bananas, seed for coffee, raw/whole/white for sugar etc.), country of production-hence exporter country-, production method (small farmer/hired labor/contract production), unit of measure (tons/kilograms), quantity, currency, Fair Trade(FT) minimum price, Fair Trade premium, percentage of FT premium in FT minimum price and their year of validity. Since different countries are using different

currencies and unit of measure may differ, I calculated FT minimum price/kg (in USD) and FT premium/kg (in USD) for each entry.

UN COMTRADE data are utilized to determine annual export values of Fair Trade participating countries. From the dataset I included only those commodities that exist in Fair Trade data set. I merged the two datasets after checking the consistency of commodity types and descriptions. This set includes the following information: year, partner country (hence interpreted as exporter as this is import data), commodity code and description, trade value, net weight (in kilograms) and trade quantity. This paper will utilize a panel econometric analysis and all analyses will be conducted using STATA. Since the analyses are based on comparisons and relative statistics, I merged Fair Trade data set with that of UN COMTRADE to observe changes in export values, using International Standards Organization (ISO) 3-digit alphabetic country codes reference to standardize the participating country names for both sets.

Table 5 provides a closer look at the data. It shows the number of Fair Trade countries the producers come from, for the given product, on a yearly and a regional basis. It is seen that cane sugar, cocoa and coffee have been more stable in terms of participation of new countries to Fair Trade, whereas there is more movement in banana, seed cotton and tea. When looking at regional comparison, most of the participation comes from Latin American countries. However, when participation is considered as a percentage of total number of regional Fair Trade countries, it is seen that Africa is the leading Fair Trade producer in cane sugar and seed cotton and Asia in tea. Yet in total, there are 36 Fair Trade participant Latin American countries, whereas it is 24 for Africa and 13 for Asia, for the 2005-2012 period. This may be a

clue that why, as shown in the following sections, the impact of Fair Trade can be observed more substantially in Latin American region's exports.

Table 5. Fair Trade participating country numbers by year and product

	Product						
Year	**Banana**	**Cane Sugar**	**Cocoa**	**Coffee**	**Seed cotton**	**Tea**	**Total**
2005	12	20	21	31	7	0	54[1]
2006	13	20	21	31	7	0	54 [1]
2007	13	20	21	31	7	0	54 [1]
2008	13	20	21	36	12	13	58 [1]
2009	13	20	21	30	12	13	54 [1]
2010	34	20	21	30	12	13	69 [1]
2011	34	20	21	30	12	13	69 [1]
2012	34	20	21	30	12	13	69 [1]
Region							
Latin America	27 (75%)	10 (28%)	13 (36%)	16 (44%)	2 (6%)	1 (3%)	36[2]
Africa	9 (38%)	6 (81%)	4 (25%)	13 (28%)	7 (29%)	5 (21%)	24 [2]
Asia	3 (23%)	4 (31%)	4 (31%)	7 (54%)	3 (23%)	7 (54%)	13 [2]

Numbers in parentheses are participation percentages calculated using total number of Fair Trade participant countries in the region.
[1] Total number of participant countries in one year is not simply the sum of rows because there are countries exporting more than one Fair Trade product at the same time, those are counted only once to prevent double-counting.
[2] Total number of Fair Trade participant countries in the given region
Source: Author's data set from Fair Trade International.

Table 6 summarizes all the critical statistics of variables used in analyses.

Table 6. Summary statistics of variables

	Count	Mean	Standard Deviation	Min	Max
Year	5079	2007.494	2.284	2004	2011
FT (t-1)	5079	0.105	0.307	0	1
Export value	5079	3.979e+08	1.127e+09	2	1.881e+10
ln export value	5079	17.114	3.251	0.693	23.657
Gdp	5079	4.649e+11	1.496e+12	22000000	1.500e+13
ln gdp	5079	24.615	2.286	16.907	30.339
Weighted distance	5079	4890.135	4156.751	114.637	19650.127
Remoteness factor	5079	-15.251	1.907	-21.836	-9.175
Population	5079	52409343.730	1.701e+08	9694	1.344e+09
ln population	5079	16.205	1.817	9.179	21.019

Source: Author's own calculations

3.2   Empirical strategy

This study examines the effect of participation in Fair Trade on exports of a country. While analyzing this research question, I will use the natural logarithm of export value of country j in product k for year t as dependent variable. This variable is named as $\ln export_{jkt}$. $\ln export_{jkt}$ is explained with the following equation:

$$\ln export_{jkt} = \delta FT_{jkt} + \alpha \ln gdp_{jt} + \beta Remoteness\ factor_{jt} + \varepsilon_{jkt}$$

Subscripts j, k and t denote country, product and year, respectively and ε_{jkt} is the error term. There are two additional factors: $\ln gdp_{jt}$ and $Remoteness\ factor_{jt}$. $\ln gdp_{jt}$ is simply the annual GDP rate of countries in US dollars (current prices). It is used as a proxy for income. It is designed to capture the effect that countries' trade values are positively correlated with income levels. Hence I expect to see its coefficient $\alpha > 0$.

$Remoteness\ factor_{jt}$ is a resistance proxy. First $totdistgdp_{jt}$ is calculated, which is each country's 'average' effective distance to or from its partners calculated using the CEPII gravity data set (Head, Mayer, & Ries, 2010) as follows:

$$totdistgdp_{jt} = \sum_i \left. d_{ji} \middle/ gdp_{jt} \right.$$

Where j is the origin and i is the destination country and d_{ji} is the bilateral distance between them. $Remoteness\ factor_{jt}$ is the natural logarithm of $totdistgdp_{jt}$:

$$Remoteness\ factor_{jt} = \ln totdistgdp_{jt}$$

This remoteness factor is added for more robust results. Its coefficient β should be negatively signed in estimation results since exports tend to decrease as the GDP-weighted bilateral distance between two countries increase.

FT_{jkt} is the Fair Trade dummy and it will be generated as follows:

$$FT_{jkt} = \begin{cases} \mathbf{1} & if\ country\ j\ participates\ Fair\ Trade, for\ product\ k, in\ year\ t \\ \mathbf{0} & otherwise \end{cases}$$

I group countries and products to create the data and use panel data estimation with fixed effects. Those fixed effect variables are removing the effects of country-specific (geography, climate, isolation etc.), product-specific (number of harvests in a year, fertility efficiency etc.) and year-specific (climate changes, droughts, floods etc.) factors on dependent variable. Furthermore, since the products mostly have 'fixed' world prices, product fixed effects are expected to control for changes in export values resulting from exchange rate differences. The equation becomes the following when fixed effects are added:

$$lnexport_{jkt} = \delta FT_{jkt} + \alpha ln\ gdp_{jt} + \beta Remoteness\ factor_{jt} + \gamma' dumyear_t$$
$$+ \theta' dumcountry_j + \varphi' dumproduct_k + \varepsilon_{jkt}$$

There are approximately 250 countries, 6 products and 9 years.

In line with my research question, the coefficient of FT_{jkt}, namely δ, is my parameter of interest. As the thesis claims, it is expected to see δ>0 because Fair Trade is linked with factors such as quality enhancement in participant country and consumer preference towards its products in the developed countries. Exports of a country should be rising after becoming a part of Fair Trade. However, one empirical consequence I predict to encounter is that the effect of Fair Trade compliance on exports may be observable in the data for the year after participation takes place.

Hence to obtain robust results, I will use the one year lagged version of FT_{jkt} dummy, namely $FT_{jk(t-1)} = lag\ FT_{jkt}$ and the previous equation becomes:

$$lnexport_{jkt} = \delta FT_{jk(t-1)} + \alpha ln\ gdp_{jt} + \beta Remoteness\ factor_{jt}$$
$$+ \gamma' dumyear_t + \theta' dumcountry_j + \varphi' dumproduct_k$$
$$+ \varepsilon_{jkt} \qquad \qquad \textbf{(1)}$$

After the first analyses, β is estimated to be positive for all equations which is not reasonable, hence $Remoteness\ factor_{jt}$ is removed from the equation.

As another robustness check, I will add product-year interaction effect as well. Although the equations are controlled for country-wide, product-wide and year-wide specific effects, at the same time products may be affected from year-related factors. With the removal of $Remoteness\ factor_{jt}$ and addition of product-year dummy for more robust results, the main equation is obtained as:

$$lnexport_{jkt} = \delta FT_{jk(t-1)} + \alpha ln\ gdp_{jt} + \gamma' dumyear_t + \theta' dumcountry_j$$
$$+ \varphi' dumproduct_k + \varphi' dumyear_t * dumproduct_k$$
$$+ \varepsilon_{jkt} \qquad \qquad \textbf{(3)}$$

In the robustness part, I will analyze the same equation using both export values and export quantities. Export values may be capturing effects resulting from exchange rate movements as well. By using export quantities this exchange rate impact will be removed and those results will yield only the movement on export amount of a country after participating in Fair Trade. Furthermore, ln GDP will be replaced with ln GDP per capita in this section.

I will conduct the same analysis on a placebo data group, which consists of the trade value for same years, all countries and all products except the products that Fair Trade is implemented. A short-hand solution to obtain this is to use trade data for only non-agricultural products from UN COMTRADE. This placebo group will be used to see whether there is any non-Fair Trade related export-augmenting trend for whole world for those years.

Another robustness measure will be trimming the outliers from the dependent variable and running the same analyses. These findings will be helpful to interpret the expected results in a healthy manner.

CHAPTER IV

RESULTS AND ROBUSTNESS

4.1   Results

All estimation results are given in Table 7. The first equation is the OLS estimation of $ln\ export_{jkt}$ over $lagFT_{jkt}$, $Remoteness\ factor_{jt}$ and $ln\ gdp_{jt}$. Estimation yields that coefficients of income and remoteness factors are both significant and positive but is not the case for lagged Fair Trade dummy. This is the estimation where $Remoteness\ factor_{jt}$ is decided to be ruled out from the equation. In estimation (2), $Remoteness\ factor_{jt}$ is excluded but coefficient of $lag\ FT_{jkt}$ is still insignificant. To strengthen the model, product-year interaction fixed effects can are added in equation (3). All the equations from that point on involve product-year interaction effect as well, as listed on the table. The coefficient of $ln\ gdp_{jt}$ is positive and significant for all those equation up to (3) as expected. Yet positive, the coefficient of $lag\ FT_{jkt}$ is still statistically insignificant. Hence it is concluded with the results of equation (3) that with all measures taken into account, there is no appreciable effect of participating in Fair Trade for countries in terms of increasing annual export values.

It is highly possible that Fair Trade implementation may show differences across regions. Since Fair Trade is established by dialogue and representation in producer level, the existence and strength of producer cooperatives or regional trading organizations would matter for its success. Furthermore, the infrastructure of the region, educational and production capacity and potential for developmental may all be effective in obtaining a healthy return from shifting to Fair Trade. Fair Trade is constructed based on one-to-one relations with the producers in the area. However, participation requires the achievement of some standards such as environmental protection, labor conditions, democracy, transparency and participation; nondiscrimination (of color, race, sex, origin etc.) and these standards' sustainability (Fair Trade International, 2012). I expect that for different regions, effects on export values may be different after participating in Fair Trade. Some regions may potentially be more suitable to reflect positive effects of Fair Trade participation, based on their absorptive capacity and potential. Absorptive capacity itself depends on structural and institutional characteristics - infrastructural constraints, skilled labor constraints and macro-balance constraints- of countries (Bourguignon & Sundberg, 2006). When countries are aggregated into regions as in this analysis, differences across them should be easier to observe.

To check this, the data set can be divided into six regional groups: Europe, North America, Central and Latin America, Africa, Asia and Oceania. Europe, North America and Oceania mostly consist of countries not engaged in Fair Trade hence they are excluded from this part of the analysis. Equations (4), (5) and (6) yield the results for Latin America, Asia and Africa regions respectively. It is seen that the coefficient of $lagFT_{jkt}$ is significant for Latin America and insignificant for

others [6] .That can be interpreted such that, given the better infrastructure and absorptive capacity, participation in Fair Trade results in increase in annual export values. This is a very promising result since it may be one explanation why there is not an overall trade-augmenting effect of Fair Trade as expected. Those less absorptive regions, where coefficient of $lagFT_{jkt}$ is insignificant, affect the overall results negatively and override absorptive regions' impact. These results combined all together imply that although we cannot observe a positive effect of Fair Trade participation on export values globally, there is a 39% increase in Latin American countries' export values on annual basis.

A stronger explanation for the distinctive increase in Latin American export values compared to rest of the world comes from the importance of Fair Trade for those countries. As seen in section 3.1, Latin American countries are involved in Fair Trade more heavily. For example, Brazil is both the most important producer of cocoa in the world, also the most important Fair Trade participant exporter of it and its cocoa exports account for nearly the half of its exports in 6 core products. Rest of its exports comes from cane sugar and similarly Brazil is the most important exporter of it among Fair Trade countries. These facts can be seen in Table 1, 2, 3 and 4. It implies that Brazil is more likely to be affected from participating to Fair Trade compared to other countries where Fair Trade is less important and more of a minor trading activity. It is also known that Brazil is a very important country among Latin America by size, income and effectiveness. Hence the importance of Fair Trade to Brazil is likely to be positively affecting the picture for Latin America as a whole. Similarly, for Ecuador, the biggest Fair Trade compliant banana exporter both in

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[6] The coefficient of $lngdp_{jt}$ is insignificant for those equations but it is positive, which is stil promising considering the positive relation of it with country exports.

value and quantity, banana exports are nearly 100% of its exports in 6 core products. Its effect is likely to strengthen the results for Latin America as well.

To examine Fair Trade participation results from a different point of view, a further analysis is conducted by dividing the GDP data into 10 quantiles and labeling countries as "Low income", "Middle income" and "High income" according to which quantile their GDP level falls into. Low income countries are determined to fall below 3rd quantile (~20% level of overall GDPs), middle income countries laying between 3rd and 8th (~between 20% and 70%) and high income countries are above the 8th quantile (~above 70%).

Equations (7), (8) and (9) show the results of panel data estimation for these three income groups respectively. For low and high income groups, the coefficient of Fair Trade dummy is negative and insignificant. On the other hand, for middle income countries the same coefficient is positive and significant. To offer an explanation, it may be said that Fair Trade participation has positive and significant effects when absorptive capacity tends to be higher. This is said by assuming that absorptive capacities are higher for middle income countries compared to low income, since better infrastructure, better education opportunities and lower capital constraints are expected for them. It is insignificant for the high income group because this group consists of North American and European countries who do not participate in Fair Trade. So the analysis is inapplicable for them. Among low income and middle income participant countries, middle income countries seem to reflect a positive effect to their export values after Fair Trade, as an annual export values for those countries increase by 23%.

Table 7. Estimation results

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**
FT (t-1)	0.046	0.047	0.033	0.356**	0.151	-0.002	-0.214	0.224*	-0.056
	(0.71)	(0.72)	(0.47)	(3.32)	(1.23)	(-0.01)	(-1.09)	(2.49)	(-0.95)
ln gdp	0.824***	0.815***	0.241*	0.342	0.272	0.052	0.939*	0.368*	0.128
	(11.52)	(11.59)	(2.12)	(1.11)	(0.91)	(0.22)	(2.20)	(2.21)	(1.44)
Remoteness factor	0.0131	.	.	.	.	.	.	.	.
	(1.02)								
Product*year interaction	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region	All	All	All	Latin America	Asia	Africa	All	All	All
Income group	All	All	All	All	All	All	Low income	Middle income	High income
N	5070	5070	5070	1005	1242	1286	1028	2523	1519
R^2	0.058	0.058	0.076	0.108	0.074	0.085	0.086	0.073	0.422

All estimations include country, product and year fixed effects.
t statistics in parentheses, $^*p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$
Source: Author's own calculation

4.2   Robustness Checks

This paper aims to examine the effect of participating in Fair Trade on annual exports of a country. In light of this question, analyses in section 4.1 are conducted using $lnexport_{jkt}$, which is the natural logarithm of countries' annual export values. Hence these values involve differences in pricing resulting from exchange rate movements as well. In section 3.1, the comparison of Table 1 and Table 2 showed that export rankings do not heavily change for export values or export quantities [7]. Still, to strengthen the results in previous section, same estimations can be done using export quantities rather than export values. Now the equation becomes:

$$lnexportquantity_{jkt} = \delta FT_{jk(t-1)} + \alpha \ln gdp_{jt} + \beta Remoteness\ factor_{jt}$$
$$+ \gamma' dumyear_t + \theta' dumcountry_j + \varphi' dumproduct_k + \varphi' dumyear_t$$
$$* dumproduct_k + \varepsilon_{jkt} \qquad \textbf{(1)}$$

The results of the robustness checks can be seen in Table 8. Equations (1') to (6') give the results of previous equations using $\ln exportquantity_{jkt}$. Furthermore, for equations (2'), (4') and (6') $\ln gdppercapita_{jt}$ is used rather than $\ln gdp_{jt}$. All coefficients for $\ln gdppercapita_{jt}$ and $\ln gdp_{jt}$ are positive yet insignificant as before. Coefficient of $lag\ FT_{jkt}$ is still insignificant for whole data set with both income proxies. When the results with Latin America are considered, Fair Trade is still statistically significant and positive with export quantities and ln gdp or ln gdp per capita.

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[7] For seed cotton and tea, exporter rankings for export value and export quantities change. For rest 4 products, those rankings are equivalent. Hence it is said that for those 4 other products are more standardized such that their prices are 'fixed' in between countries and exchange rate differences do not affect pricing.

However, the increase in export quantities is 23% with ln gdp and 22% with ln gdp per capita, which are lower compared to findings in section 4.1.   On the other hand, participation of middle income countries to Fair Trade no more yields significant results with export quantities, whether ln gdp or ln gdp per capita is used.

In general, it is evident in section 4.1 that a positive correlation between export values and Fair Trade participation for Latin American countries and middle income countries are found. However, it may be the case that there are overall export increase trends for those countries, resulting from some factors which are not accounted in analyses in this paper. If this is so, the conclusion that Fair Trade enhances export value might be misleading. To see whether such a trend exists, a new data set is generated from UN COMTRADE for years 2004-2011, for all countries and all products except agricultural products to be used in a placebo analysis. By leaving agricultural products aside, Fair Trade is removed from the picture since they are all agricultural products. However, to identify Fair Trade participating countries from non-participants, Fair Trade dummy FT_{jkt} is redefined. Now it takes 1 if a country participated in Fair Trade for any product for a year, although that product is no longer in data set. The dependent variable is sum of export values of country j in year t for all its non-agricultural products.

First, in equation (7'), non-agricultural trade analysis is conducted for the World. Fair Trade dummy is still not significant for all countries. Hence it can be said that there is not a global export-increase trend for non-agricultural products as well. Equations (8') and (9'), summarize the results for same analysis on Latin American countries and middle income countries respectively. Coefficient of $lag\ FT_{jkt}$ is no longer significant when Fair Trade products are removed from the

33

picture. It implies that for those country groups, there is not a general export-increase trend. Same equation with same dependent and independent variables yielded positive results when Fair Trade was taken into consideration. This result strengthens my previous findings because it implies when Fair Trade impact is removed, the augmenting behavior in annual export values of those countries cannot be observed.

Another robustness check is to trimming the tails to remove outlier trade values. Findings for Fair Trade are strengthened further because export-augmenting impact of Fair Trade is persistent with trimmed dependent variables as well.

In Table 8, the results with trimmed versions can be seen. Tails of the data set of equation (4) in Table 7 are trimmed for Latin American countries for 1% in equation (10') and 5% in equation (11') respectively. Coefficients are statistically significant although they have lower values. Fair Trade effect for Latin America decreased from 36% annual export increase to 34% with 1% trimmed data and to 30% with 5% trimmed one, yet these are meaningful results. In equations (12') and (13') same robustness check is done for middle income countries using data set in equation (8) in Table 7. With 5% trimming, Fair Trade effect falls from 22% annual export increase to 17%, whereas it doesn't change with 1% trimming. The significance of the coefficient persists for both Latin American and middle income countries. To sum up, although there are differences in coefficient values, the Fair Trade impact on exports, as sketched by the rest of the thesis, can still be positively observed after robustness checks.

Table 8. Robustness results

	(1')	(2')	(3')	(4')	(5')	(6')
	ln export quantity	ln export quantity	ln export quantity	ln export quantity	ln export quantity	ln export quantity
FT (t-1)	0.100	0.0973	0.227**	0.222**	0.153	0.160
	(1.48)	(1.43)	(2.77)	(2.73)	(1.75)	(1.83)
ln gdp	0.0578	.	-0.299	.	0.108	.
	(0.72)		(-1.97)		(0.94)	
ln gdp per capita	.	0.0745	.	-0.328	.	0.109
		(0.81)		(-1.94)		(0.81)
Data group	World	World	Latin America	Latin America	Middle income	Middle income
N	5081	5081	1017	1017	2549	2549
R²	0.001	0.001	0.015	0.015	0.002	0.002

All estimations include country, product and year fixed effects and product*year interaction.
t statistics in parentheses, * p < 0.05, ** p < 0.01, *** p < 0.001
Source: Author's own calculations

Table 8 (cont'd). Robustness results

	(7')	(8')	(9')	(10')	(11')	(12')	(13')
	ln export value (nonagr)	ln export value (nonagr)	ln export value (nonagr)	ln export value (1% trimmed)	ln export value (5% trimmed)	ln export value (1% trimmed)	ln export value (5% trimmed)
FT (t-1)	-0.025	-0.029	-0.017	0.342**	0.295**	0.225*	0.171
	(-0.73)	(-0.35)	(-0.53)	(3.02)	(2.63)	(2.46)	(1.90)
ln gdp	0.664***	0.102	0.621***	0.181	0.0615	0.369*	0.357*
	(8.34)	(0.55)	(6.04)	(0.58)	(0.22)	(2.18)	(2.37)
ln gdp per capita	.	.	.	.	.	.	.
Data group	World	Latin America	Middle income	Latin America	Latin America	Middle income	Middle income
N	1408	202	706	1011	1011	2539	2539
R^2	0.989	0.973	0.971	0.073	0.061	0.080	0.090

All estimations include country, product and year fixed effects and product year*interaction.
t statistics in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Source: Author's own calculations

CHAPTER V

CONCLUSION

Although low in overall world export share, Fair Trade is offered as an alternative trading system for developing countries in this paper. It is a response to the failure of conventional trade in terms of development of agriculture in world's poorest countries and sustainability of livelihoods of local farmers. Fair Trade's prominent channel for supporting the producers comes out to be 'individual betterment' principle using higher prices and producer Premium. However this paper leans on another possible impact of Fair Trade that it may be helpful for the welfare enhancement of producers on country-basis. Analyses yielded that although no such effect can be obtained for all countries in general, it is found that Fair Trade increases annual export values and quantities of Latin American region and it increases annual export values of middle income countries as a group. These findings are proved to be robust after several tests.

Most sound explanation for the fact that Fair Trade is positively effective for only a group of countries comes from the fact that Latin American countries are more important players in Fair Trade, since the largest Fair Trade exporter of more than one core product is coming from that geography. Furthermore, those products

are mostly important exports of the countries in Latin America. Those products account for an important part of Latin American countries' exports, whereas that is that not the case for other regions.

A second explanation to differences in results among regions and income groups is absorptive capacity. Different countries and regions have different absorptive capacities; hence participation in Fair Trade can be evaluated separately. It can be said that, giving importance to infrastructure and background facilities before implementing such a measure, true allocation of Fair Trade Premium on education and production process enhancement to obtain quicker and effective responses are as important as participating to Fair Trade itself. With lower or unutilized producer potential, countries may be missing some of the gains of this initiative of the channel discussed in this paper.

As a final remark, this paper leaves two points open to future research. First, although the export-augmenting effect of Fair Trade is shown for some countries, it cannot directly be linked to welfare enhancement for those countries. This paper did not examine the existing and additional income generated by agriculture through Fair Trade because of the limits of data constraints. Using such tools, determining the factors that may be helpful for a successful transformation of increased exports to welfare would be a good contribution to the paper. Second, the determinants and measurement of absorptive capacity and an analysis of those would be beneficial for policy recommendations and Fair Trade implementation. In the existing literature, a number of empirical analysis use the technological achievement index (TAI) developed by UNDP as a proxy for absorptive capacity. Similarly, Márquez-Ramos & Martínez-Zarzoso (2011) apply the Human Development Index (HDI) as a proxy

for absorptive capacity depending on the fact that technological achievement and human development indices show similar country rankings. They understand technological achievement as absorptive capacity. By choosing such a proxy and adding it to existing model, the author's interpretation about the results in this paper can be strenghtened. Through understanding these channels, a more effective Fair Trade dialogue can be set and the goal of improving the welfare of the poor, agrarian societies can be achieved more successively.

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