Online Appendix for

The Effects of Fair Trade Certification: Evidence From Coffee Producers in Costa Rica

Raluca Dragusanu

Thoughtful Data

Eduardo Montero

University of Chicago

Nathan Nunn

Harvard University

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Appendix Figures

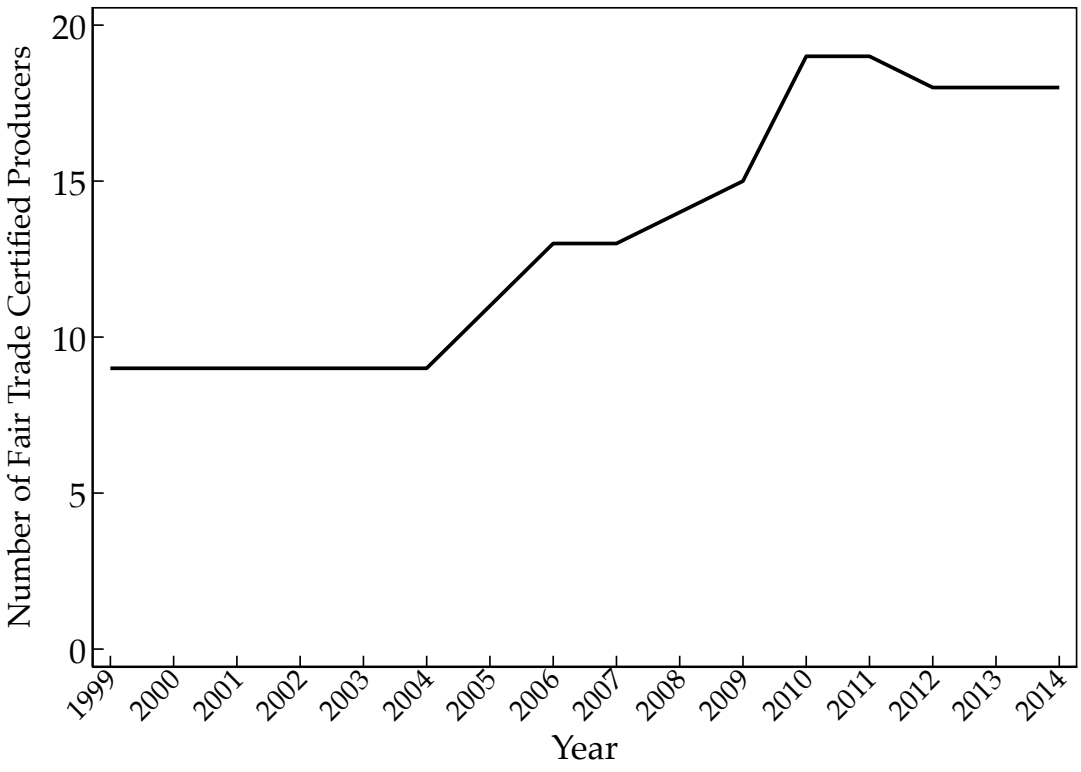

Figure A1: Number of Fair Trade Certified Mills, 1999–2014

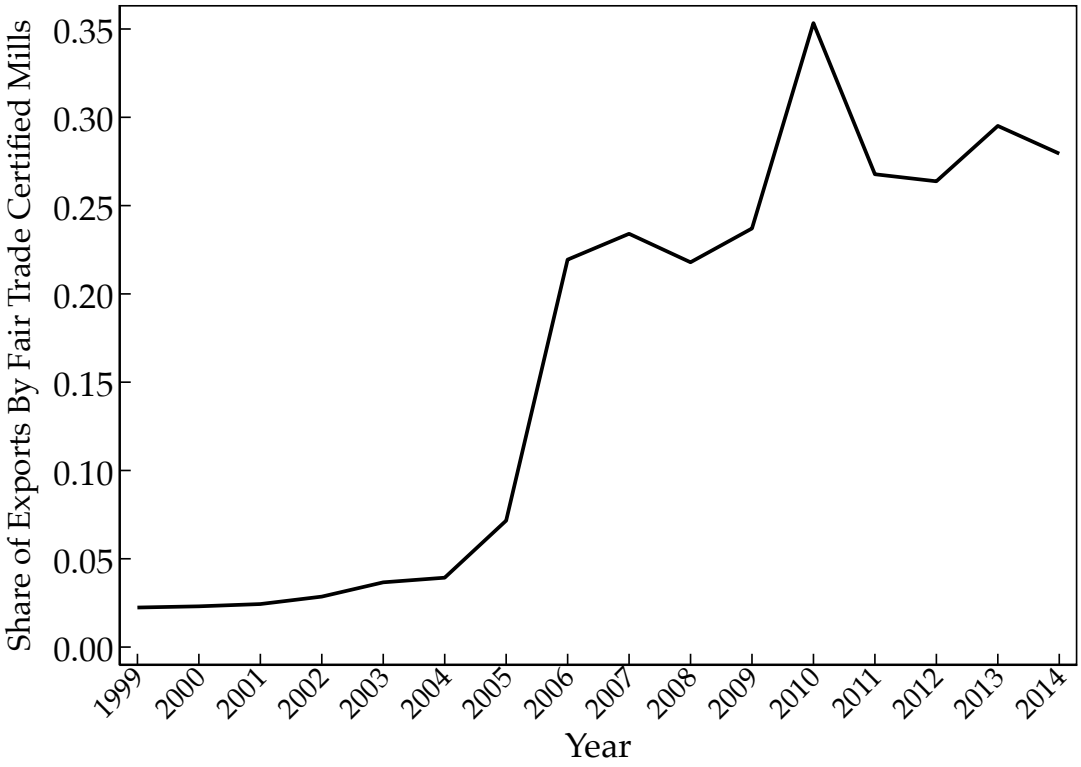

Figure A2: Share of Total Coffee Exports Made by Fair Trade Certified Mills, 1999–2014

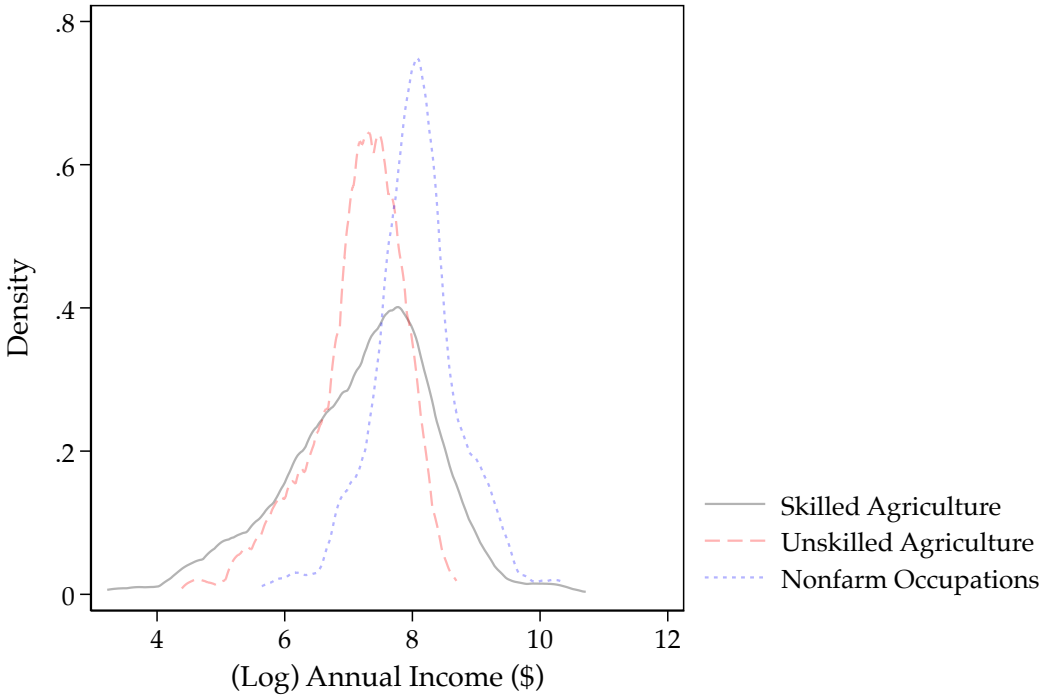

Figure A3: Income Distributions by Occupation Groups

Appendix Tables

Table A1: Summary Statistics for Mill-Level Analysis

Variable	Observations	Mean	Standard Deviation
Fair Trade Certified (1/0)	2194	0.10	0.30
Price Gap Indicator (1/0)	2194	0.41	0.49
Price Gap (USD/lb)	2194	0.13	0.22
Share of Quantity Received that is Sold (%)	1740	97.3%	9.4%
Domestic Price (USD/lb)	2038	1.14	0.63
Export Price (USD/lb)	2000	1.48	0.63
Domestic Quantity (lbs)	2192	278,896	541,877
Export Quantity (lbs)	2193	1,590,666	2,875,751
Total Quantity Sold (lbs)	2191	1,870,884	3,297,357
Total Quantity Received (lbs)	1819	1,544,765	3,017,951
Total Revenue (USD)	1928	2,456,420	4,301,392
Domestic Revenue (USD)	2038	287,257	603,411
Export Revenue (USD)	2000	2,095,297	3,810,584

Table A2: Summary Statistics for Household-Level Analysis

Variable	Observations	Mean	Standard deviation
Individual monthly income (Colones)	143,364	185,689	257,087
Fair Trade Intensity (FTI) Measures:			
Export weighted (baseline)	143,364	0.09	0.27
Production weighted	143,364	0.09	0.27
Time invariant export weights	143,364	0.10	0.29
Initial (2001) export weights	143,364	0.10	0.29
Indicator if at least one mill is FT certified	143,364	0.16	0.37
Industry of primary occupation is Coffee (1/0)	143,364	0.02	0.14
Primary occupation is skilled agriculture (1/0)	143,364	0.06	0.24
Primary occupation is unskilled agriculture (1/0)	143,364	0.12	0.32
Primary occupation is nonfarm agriculture(1/0)	143,364	0.82	0.38

Table A3: Sub-Occupations of the Three Occupational Categories

	Workers in the coffee industry:			
Detailed description:	**Skilled agriculture**	**Unskilled agriculture**	**Nonfarm occupations**	**Total**
Farmers or skilled workers in crop production	939	0	0	939
Agricultural laborers	0	1,454	0	1,454
Coffee pickers	0	269	0	269
Technical or middle professions in chemistry, physics, or engineering	0	0	55	55
Driving of vehicles and operating heavy machinery	0	0	19	19
Services, protection or security	0	0	17	17
Management level at private companies or public institutions	0	0	12	12
Support of the administrative process	0	0	10	10
Unskilled occupations in mining, construction, manufacturing and transportation	0	0	10	10
Mechanical construction, metallurgy, and related occupations	0	0	9	9
Other technical or middle professional level occupations	0	0	9	9
Unskilled occupations in sales and services	0	0	8	8
Salesemen at shops and wharehouses	0	0	7	7
Operating and installing cement or metallurgy machinery	0	0	6	6
Breeders of livestock or producers of milk and its derivatives	4	0	0	4
Professional level occupations in life sciences, medicine and health	0	0	4	4
Skilled occupations in construction industries	0	0	3	3
Technical-level occupations in life sciences, medicine and health	0	0	1	1
Other laborer	0	0	1	1
Total:	943	1,723	171	2,837

Notes: Data are from the 2001-2009 household surveys. The table reports the number of observations in each occupation category for workers whose primary industry is coffee for various groups of workers. For skilled and unskilled agricultural workers, we report occupations using the most detailed occupation codes. For nonfarm workers, we report occupations using one higher level of aggregation.

Table A4: Descriptive Statistics for the Three Occupational Categories

	All occupations	Skilled agriculture	Unskilled agriculture	Nonfarm occupations
Income (US dollars per year)	$2,019	$2,432	$1,592	$4,047
Age (years)	41	50	36	43
Gender (percent male)	94%	97%	93%	83%
Schooling (years completed)	6.0	6.3	5.7	8.2
Urban residence (percent)	4.97%	4.98%	3.37%	21.05%
Number of observations	2,837	943	1,723	171

Notes : The table reports average characteristics of individuals with different occupations working in the coffee industry in Costa Rica. Average monthly income is converted to U.S. dollars per year, assuming that 500 Costa Rican colones is equal to approximately one U.S. dollar. A location of residence is defined as being urban by the Costa Rican National Institute for Statistics and Censuses (INEC) if a respondent's residence is in the adminsitrative centers of a district, and rural otherwise.

Robustness to Alternative Coffee Price Data: ICE Coffee C Future Prices

Table A5: The Effect of FT Certification on Sales Prices, using ICE Coffee Prices

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent variable:							
	Domestic Price (USD/lb)		ln Domestic Price		Export Price (USD/lb)		ln Export Price	
Fair Trade Certified, FTC	-0.072**	-0.044*	-0.041	-0.024	-0.051	-0.033	0.000	0.009
	(0.028)	(0.025)	(0.038)	(0.038)	(0.034)	(0.030)	(0.025)	(0.025)
FTC x Price Gap Indicator	0.094***		0.080**		0.060**		0.034**	
	(0.036)		(0.032)		(0.027)		(0.016)	
FTC x Price Gap (USD/lb)		0.151*		0.198*		0.095		0.065
		(0.078)		(0.117)		(0.061)		(0.094)
Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y	Y	Y
Observations	2,038	2,038	2,038	2,038	2,000	2,000	2,000	2,000
Number of clusters/mills	326	326	326	326	307	307	307	307
Mean of dep. variable	1.13	1.13	-0.03	-0.03	1.47	1.47	0.30	0.30
Std. dev. of dep. variable	0.58	0.58	0.61	0.61	0.61	0.61	0.43	0.43

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the domestic price calculated as the average price obtained by a mill in a given year for the domestic coffee sales transactions and expressed in USD/lb. The domestic price was winsorized at the 99th percentile. The dependent variable in columns 3 and 4 is the natural logarithm of the non-winsorized domestic price. The dependent variable in columns 5 and 6 is the export price calculated as the average price obtained by a mill in a given year in export coffee sales transactions and expressed in USD/lb. The export price was winsorized at the 99th percentile. The dependent variable in columns 7 and 8 is the natural logarithm of the non-winsorized export price. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from \$1.20/lb to \$1.25/lb in June 2008 and to \$1.40/lb in April 2011. The Fair Trade premium was increased from \$0.05/lb to \$0.10/lb in June 2007 and to \$0.20/lb in April 2011. Coefficients are reported with standard errors clustered at the mill-level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A6: The Effect of FT Certification on Quantities Received and Sold by Mills, using ICE Coffee Prices

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable:					
	ln Total Quantity Received		ln Total Quantity Sold		Fraction of Quantity Received that is Sold	
Fair Trade Certified, FTC	-0.131	-0.056	-0.246	-0.124	-0.004	-0.007
	(0.142)	(0.131)	(0.160)	(0.142)	(0.010)	(0.011)
FTC x Price Gap Indicator	0.385***		0.409***		0.005	
	(0.110)		(0.140)		(0.015)	
FTC x Price Gap (USD/lb)		0.937**		0.644*		0.060
		(0.376)		(0.360)		(0.100)
Year FE	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y
Observations	1,740	1,740	2,108	2,108	1,740	1,740
Number of clusters/mills	306	306	328	328	306	306
Mean of dep. variable	12.55	12.55	12.85	12.85	0.97	0.97
Std. dev. of dep. variable	2.18	2.18	2.19	2.19	0.09	0.09

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the natural logarithm of the total quantity received by the mill from coffee farmers. This variable is only reported in the sample years 2003 to 2014. The dependent variable in columns 3 and 4 is the natural logarithm of the total quantity (expressed in lbs) sold by a mill on the export market and domestic market. The dependent variable in columns 5 and 6 is equal to the ratio of total quantity sold and total quantity received. Note that this variable is only reported in the sample years 2003 to 2014. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from \$1.20/lb to \$1.25/lb in June 2008 and to \$1.40/lb in April 2011. The Fair Trade premium was increased from \$0.05/lb to \$0.10/lb in June 2007 and to \$0.20/lb in April 2011. Coefficients are reported with standard errors clustered at the mill-level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A7: The Effect of FT Certification on Quantity Sold Domestically and Internationally, using ICE Coffee Prices

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable:					
	ln Domestic Quantity Sold		ln Export Quantity Sold		Export Quantity as a Fraction of Total Quantity Sold	
Fair Trade Certified, FTC	-0.483**	-0.301	-0.140	-0.044	0.075**	0.054*
	(0.234)	(0.214)	(0.180)	(0.164)	(0.033)	(0.031)
FTC x Price Gap Indicator	0.722***		0.294*		-0.077**	
	(0.160)		(0.157)		(0.031)	
FTC x Price Gap (USD/lb)		1.474***		0.380		-0.142**
		(0.387)		(0.376)		(0.062)
Year FE	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y
Observations	2,038	2,038	2,000	2,000	2,110	2,110
Number of clusters/mills	326	326	307	307	329	329
Mean of dep. variable	10.9	10.9	12.8	12.8	0.79	0.79
Std. dev. of dep. variable	2.3	2.3	2.1	2.1	0.25	0.25

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the natural logarithm of the total quantity (expressed in lbs) sold by a mill on the domestic market. The dependent variable in columns 3 and 4 is the natural logarithm of the total quantity (expressed in lbs) sold by a mill on the export market. The dependent variable in columns 5 and 6 is equal to the ratio of export quantity sold over total quantity sold. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from \$1.20/lb to \$1.25/lb in June 2008 and to \$1.40/lb in April 2011. The Fair Trade premium was increased from \$0.05/lb to \$0.10/lb in June 2007 and to \$0.20/lb in April 2011. Coefficients are reported with standard errors clustered at the mill-level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A8: The Effect of FT Certification on Revenues, using ICE Coffee Prices

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable:					
	ln Total Revenue		ln Domestic Revenue		ln Export Revenue	
Fair Trade Certified, FTC	-0.249	-0.120	-0.524**	-0.325	-0.140	-0.034
	(0.159)	(0.142)	(0.247)	(0.229)	(0.176)	(0.161)
FTC x Price Gap Indicator	0.429***		0.802***		0.328**	
	(0.139)		(0.174)		(0.155)	
FTC x Price Gap (USD/lb)		0.669*		1.672***		0.446
		(0.370)		(0.433)		(0.383)
Year FE	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y
Observations	2,110	2,110	2,038	2,038	2,000	2,000
Number of clusters/mills	329	329	326	326	307	307
Mean of dep. variable	13.12	13.12	10.83	10.83	13.10	13.10
Std. dev. of dep. variable	2.02	2.02	2.17	2.17	1.95	1.95

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the total revenue (expressed in USD) obtained by a mill in a given year and equals the sum of domestic and export revenue. The dependent variable in columns 3 and 4 is the natural logarithm of domestic revenue (expressed in USD) obtained by a mill in a given year. The dependent variable in columns 5 and 6 is the natural logarithm of export revenue (expressed in USD) obtained by a mill in a given year. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from \$1.20/lb to \$1.25/lb in June 2008 and to \$1.40/lb in April 2011. The Fair Trade premium was increased from \$0.05/lb to \$0.10/lb in June 2007 and to \$0.20/lb in April 2011. Coefficients are reported with standard errors clustered at the mill level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A9: Price of Coffee Sold by Mills, 2001–2009, using ICE Coffee Prices

	(1)	(2)	(3)	(4)
	Dependent variable:			
	Domestic Price (USD/lb)	ln Domestic Price	Export Price (USD/lb)	ln Export Price
Fair Trade Certified, FTC	-0.007	0.008	0.062***	0.087***
	(0.027)	(0.069)	(0.023)	(0.032)
Year FE	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y
Observations	977	977	972	972
Number of clusters/mills	209	209	201	201
Mean of dep. variable	0.79	-0.36	1.08	0.02
Std. dev. of dep. variable	0.37	0.56	0.34	0.34

Notes : The table reports OLS estimates of equation (2). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in column 1 is the domestic price calculated as the average price obtained by a mill in a given year for the domestic coffee sales transactions and expressed in USD/lb. The domestic price was winsorized at the 99th percentile. The dependent variable in column 2 is the natural logarithm of the non-winsorized domestic price. The dependent variable in column 3 is the export price calculated as the average price obtained by a mill in a given year in export coffee sales transactions and expressed in USD/lb. The export price was winsorized at the 99th percentile. The dependent variable in column 4 is the natural logarithm of the non-winsorized export price. Coefficients are reported with standard errors clustered at the mill-level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Impacts of FT Certification Controlling for Other Certifications

Table A10: Relationship between FT Certification and Other Certifications

	Panel A: FT certification onset		
	Dependent variable: Indicator for the onset of FT certification		
	(1)	(2)	(3)
One-year lagged Rainforest Alliance or Organic Certification	0.074		
	(0.071)		
One-year lagged Rainforest Alliance Certification		0.080	
		(0.078)	
One-year lagged Organic Certification			0.010
			(0.008)
Duration: 3rd order polynomial	Y	Y	Y
Year FE, Mill FE	Y	Y	Y
Observations	1,673	1,673	1,673
Mean Dependent Variable	0.00598	0.00598	0.00598
SD Dependent Variable	0.0771	0.0771	0.0771
	Panel B: Other certification onset		
	Dependent variable: Indicator for the onset of certification:		
	Either Rainforest Alliance or Organic	Rainforest Alliance Only	Organic Only
	(1)	(2)	(3)
One-year lagged FT Certification	-0.015*	-0.015*	0.000
	(0.008)	(0.008)	(0.000)
Duration: 3rd order polynomial	Y	Y	Y
Year FE, Mill FE	Y	Y	Y
Observations	1,814	1,825	1,852
Mean Dependent Variable	0.00441	0.00384	0.000540
SD Dependent Variable	0.0663	0.0618	0.0232

Notes: Coefficients are reported with standard errors clustered at the mill level in parentheses. All regressions include year fixed effects, mill fixed effects, and a third-order polynomial in duration of not being certified. The dependent variable is an indicator variable that equals one if the mill switches to being certified in that year. Panel A examines FT certification onset; Panel B examines the onset of other certifications (Rainforest Alliance or Organic). The sample includes all observations where a mill was not certified in the previous year. Once a mill becomes certified, they are no longer in the sample. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A11: The Effect of FT Certification on Sales Prices, Controlling for Other Certifications

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent variable:							
	Domestic Price (USD/lb)		ln Domestic Price		Export Price (USD/lb)		ln Export Price	
Fair Trade Certified, FTC	-0.043*	-0.034	-0.018	-0.011	-0.043	-0.029	0.008	0.015
	(0.026)	(0.024)	(0.038)	(0.037)	(0.032)	(0.029)	(0.024)	(0.023)
FTC x Price Gap Indicator	0.055		0.063		0.076***		0.042**	
	(0.035)		(0.038)		(0.022)		(0.020)	
FTC x Price Gap (USD/lb)		0.107		0.184		0.115*		0.082
		(0.079)		(0.128)		(0.063)		(0.102)
Rain Forest Alliance	-0.023	-0.023	-0.04	-0.042	-0.023	-0.022	-0.047	-0.047
	(0.041)	(0.040)	(0.048)	(0.048)	(0.027)	(0.027)	(0.031)	(0.031)
Organic	-0.302***	-0.302***	-0.205***	-0.205***	0.087***	0.087***	-0.019**	-0.019**
	(0.018)	(0.018)	(0.013)	(0.013)	(0.017)	(0.017)	(0.008)	(0.008)
Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y	Y	Y
Observations	2,038	2,038	2,038	2,038	2,000	2,000	2,000	2,000
Number of clusters/mills	326	326	326	326	307	307	307	307
Mean of dep. variable	1.13	1.13	-0.03	-0.03	1.47	1.47	0.30	0.30
Std. dev. of dep. variable	0.58	0.58	0.61	0.61	0.61	0.61	0.43	0.43

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the domestic price calculated as the average price obtained by a mill in a given year for the domestic coffee sales transactions and expressed in USD/lb. The domestic price was winsorized at the 99th percentile. The dependent variable in columns 3 and 4 is the natural logarithm of the non-winsorized domestic price. The dependent variable in columns 5 and 6 is the export price calculated as the average price obtained by a mill in a given year in export coffee sales transactions and expressed in USD/lb. The export price was winsorized at the 99th percentile. The dependent variable in columns 7 and 8 is the natural logarithm of the non-winsorized export price. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from \$1.20/lb to \$1.25/lb in June 2008 and to \$1.40/lb in April 2011. The Fair Trade premium was increased from \$0.05/lb to \$0.10/lb in June 2007 and to \$0.20/lb in April 2011. Coefficients are reported with standard errors clustered at the mill-level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A12: The Effect of FT Certification on Quantities Received and Sold by Mills, Controlling for Other Certifications

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable:					
	ln Total Quantity Received		ln Total Quantity Sold		Fraction of Quantity Received that is Sold	
Fair Trade Certified, FTC	-0.089	-0.035	-0.179	-0.109	-0.000	-0.006
	(0.128)	(0.115)	(0.149)	(0.133)	(0.007)	(0.007)
FTC x Price Gap Indicator	0.396**		0.373*		-0.016**	
	(0.161)		(0.200)		(0.007)	
FTC x Price Gap (USD/lb)		0.815*		0.569		0.042
		(0.440)		(0.428)		(0.113)
Rain Forest Alliance	0.204**	0.205**	0.226***	0.229***	0.018***	0.017***
	(0.094)	(0.091)	(0.082)	(0.080)	(0.005)	(0.006)
Organic	0.398***	0.400***	0.410***	0.412***	0.026***	0.026***
	(0.056)	(0.056)	(0.056)	(0.057)	(0.006)	(0.006)
Year FE	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y
Observations	1,740	1,740	2,108	2,108	1,740	1,740
Number of clusters/mills	306	306	328	328	306	306
Mean of dep. variable	12.55	12.55	12.85	12.85	0.97	0.97
Std. dev. of dep. variable	2.18	2.18	2.19	2.19	0.09	0.09

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the natural logarithm of the total quantity received by the mill from coffee farmers. This variable is only reported in the sample years 2003 to 2014. The dependent variable in columns 3 and 4 is the natural logarithm of the total quantity (expressed in lbs) sold by a mill on the export market and domestic market. The dependent variable in columns 5 and 6 is equal to the ratio of total quantity sold and total quantity received. Note that this variable is only reported in the sample years 2003 to 2014. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from \$1.20/lb to \$1.25/lb in June 2008 and to \$1.40/lb in April 2011. The Fair Trade premium was increased from \$0.05/lb to \$0.10/lb in June 2007 and to \$0.20/lb in April 2011. Coefficients are reported with standard errors clustered at the mill-level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A13: The Effect of FT Certification on Quantity Sold Domestically and Internationally, Controlling for Other Certifications

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable:					
	ln Domestic Quantity Sold		ln Export Quantity Sold		Export Quantity as a Fraction of Total Quantity Sold	
Fair Trade Certified, FTC	-0.370*	-0.251	-0.104	-0.044	0.053	0.043
	(0.215)	(0.199)	(0.172)	(0.157)	(0.033)	(0.031)
FTC x Price Gap Indicator	0.730***		0.279		-0.061	
	(0.204)		(0.199)		(0.044)	
FTC x Price Gap (USD/lb)		1.455***		0.301		-0.125
		(0.435)		(0.422)		(0.076)
Rain Forest Alliance	0.203	0.2	0.279***	0.285***	0.045*	0.045*
	(0.177)	(0.174)	(0.084)	(0.084)	(0.024)	(0.024)
Organic	1.126***	1.131***	0.348***	0.350***	-0.063***	-0.063***
	(0.083)	(0.083)	(0.065)	(0.065)	(0.017)	(0.017)
Year FE	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y
Observations	2,038	2,038	2,000	2,000	2,110	2,110
Number of clusters/mills	326	326	307	307	329	329
Mean of dep. variable	10.9	10.9	12.8	12.8	0.79	0.79
Std. dev. of dep. variable	2.3	2.3	2.1	2.1	0.25	0.25

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the natural logarithm of the total quantity (expressed in lbs) sold by a mill on the domestic market. The dependent variable in columns 3 and 4 is the natural logarithm of the total quantity (expressed in lbs) sold by a mill on the export market. The dependent variable in columns 5 and 6 is equal to the ratio of export quantity sold over total quantity sold. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for in years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from \$1.20/lb to \$1.25/lb in June 2008 and to \$1.40/lb in April 2011. The Fair Trade premium was increased from \$0.05/lb to \$0.10/lb in June 2007 and to \$0.20/lb in April 2011. Coefficients are reported with standard errors clustered at the mill-level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A14: The Effect of FT Certification on Revenues, Controlling for Other Certifications

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable:					
	ln Total Revenue		ln Domestic Revenue		ln Export Revenue	
Fair Trade Certified, FTC	-0.175	-0.100	-0.388*	-0.262	-0.096	-0.029
	(0.150)	(0.134)	(0.230)	(0.214)	(0.169)	(0.155)
FTC x Price Gap Indicator	0.395*		0.794***		0.322	
	(0.201)		(0.216)		(0.199)	
FTC x Price Gap (USD/lb)		0.603		1.639***		0.383
		(0.438)		(0.473)		(0.433)
Rain Forest Alliance	0.168*	0.172*	0.163	0.158	0.232***	0.238***
	(0.093)	(0.090)	(0.169)	(0.164)	(0.086)	(0.086)
Organic	0.347***	0.349***	0.921***	0.926***	0.329***	0.331***
	(0.057)	(0.057)	(0.087)	(0.087)	(0.065)	(0.065)
Year FE	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y
Observations	2,110	2,110	2,038	2,038	2,000	2,000
Number of clusters/mills	329	329	326	326	307	307
Mean of dep. variable	13.12	13.12	10.83	10.83	13.10	13.10
Std. dev. of dep. variable	2.02	2.02	2.17	2.17	1.95	1.95

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the total revenue (expressed in USD) obtained by a mill in a given year and equals the sum of domestic and export revenue. The dependent variable in columns 3 and 4 is the natural logarithm of domestic revenue (expressed in USD) obtained by a mill in a given year. The dependent variable in columns 5 and 6 is the natural logarithm of export revenue (expressed in USD) obtained by a mill in a given year. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for in years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from \$1.20/lb to \$1.25/lb in June 2008 and to \$1.40/lb in April 2011. The Fair Trade premium was increased from \$0.05/lb to \$0.10/lb in June 2007 and to \$0.20/lb in April 2011. Coefficients are reported with standard errors clustered at the mill level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A15: Price of Coffee Sold by Mills, 2001–2009, Controlling for Other Certifications

	(1)	(2)	(3)	(4)
	Dependent variable:			
	Domestic Price (USD/lb)	ln Domestic Price	Export Price (USD/lb)	ln Export Price
Fair Trade Certified, FTC	-0.008	0.006	0.059**	0.082**
	(0.027)	(0.069)	(0.024)	(0.032)
Rain Forest Alliance	-0.049	-0.059	-0.092*	-0.137**
	(0.036)	(0.098)	(0.049)	(0.055)
Year FE	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y
Observations	977	977	972	972
Number of clusters/mills	209	209	201	201
Mean of dep. variable	0.79	-0.36	1.08	0.02
Std. dev. of dep. variable	0.37	0.56	0.34	0.34

Notes : The table reports OLS estimates of equation (2). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in column 1 is the domestic price calculated as the average price obtained by a mill in a given year for the domestic coffee sales transactions and expressed in USD/lb. The domestic price was winsorized at the 99th percentile. The dependent variable in column 2 is the natural logarithm of the non-winsorized domestic price. The dependent variable in column 3 is the export price calculated as the average price obtained by a mill in a given year in export coffee sales transactions and expressed in USD/lb. The export price was winsorized at the 99th percentile. The dependent variable in column 4 is the natural logarithm of the non-winsorized export price. Organic certification status is excluded because no mills changed Organic certification status between 2001 and 2009. Coefficients are reported with standard errors clustered at the mill-level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Impacts of FT Certification Controlling for Initial Export Share

Table A16: The Effect of FT Certification on Sales Prices, Controlling for Initial Export Share

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent variable:							
	Domestic Price (USD/lb)		ln Domestic Price		Export Price (USD/lb)		ln Export Price	
Fair Trade Certified, FTC	-0.038	-0.028	-0.020	-0.016	-0.041	-0.028	0.008	0.015
	(0.025)	(0.022)	(0.038)	(0.037)	(0.032)	(0.030)	(0.024)	(0.024)
FTC x Price Gap Indicator	0.057		0.062		0.077***		0.043**	
	(0.036)		(0.038)		(0.021)		(0.019)	
FTC x Price Gap (USD/lb)		0.118		0.171		0.122**		0.093
		(0.080)		(0.130)		(0.062)		(0.104)
Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y	Y	Y
Initial Share Exported x Price Gap	Y	Y	Y	Y	Y	Y	Y	Y
Observations	2,038	2,038	2,038	2,038	2,000	2,000	2,000	2,000
Number of clusters/mills	326	326	326	326	307	307	307	307
Mean of dep. variable	1.13	1.13	-0.03	-0.03	1.47	1.47	0.30	0.30
Std. dev. of dep. variable	0.58	0.58	0.61	0.61	0.61	0.61	0.43	0.43

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the domestic price calculated as the average price obtained by a mill in a given year for the domestic coffee sales transactions and expressed in USD/lb. The domestic price was winsorized at the 99th percentile. The dependent variable in columns 3 and 4 is the natural logarithm of the non-winsorized domestic price. The dependent variable in columns 5 and 6 is the export price calculated as the average price obtained by a mill in a given year in export coffee sales transactions and expressed in USD/lb. The export price was winsorized at the 99th percentile. The dependent variable in columns 7 and 8 is the natural logarithm of the non-winsorized export price. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from $1.20/lb to $1.25/lb in June 2008 and to $1.40/lb in April 2011. The Fair Trade premium was increased from $0.05/lb to $0.10/lb in June 2007 and to $0.20/lb in April 2011. The Initial Export Share variable measures the share of production that was exported in the first year a mill is observed in the sample. Coefficients are reported with standard errors clustered at the mill-level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A17: The Effect of FT Certification on Quantities Received and Sold by Mills, Controlling for Initial Export Share

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable:					
	ln Total Quantity Received		ln Total Quantity Sold		Fraction of Quantity Received that is Sold	
Fair Trade Certified, FTC	-0.061	-0.004	-0.163	-0.102	0.002	-0.003
	(0.138)	(0.125)	(0.155)	(0.139)	(0.008)	(0.008)
FTC x Price Gap Indicator	0.400**		0.381*		-0.016**	
	(0.160)		(0.200)		(0.007)	
FTC x Price Gap (USD/lb)		0.850*		0.556		0.045
		(0.442)		(0.450)		(0.113)
Year FE	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y
Initial Share Exported x Price Gap	Y	Y	Y	Y	Y	Y
Observations	1,740	1,740	2,108	2,108	1,740	1,740
Number of clusters/mills	306	306	328	328	306	306
Mean of dep. variable	12.55	12.55	12.85	12.85	0.97	0.97
Std. dev. of dep. variable	2.18	2.18	2.19	2.19	0.09	0.09

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the natural logarithm of the total quantity received by the mill from coffee farmers. This variable is only reported in the sample years 2003 to 2014. The dependent variable in columns 3 and 4 is the natural logarithm of the total quantity (expressed in lbs) sold by a mill on the export market and domestic market. The dependent variable in columns 5 and 6 is equal to the ratio of total quantity sold and total quantity received. Note that this variable is only reported in the sample years 2003 to 2014. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from \$1.20/lb to \$1.25/lb in June 2008 and to \$1.40/lb in April 2011. The Fair Trade premium was increased from \$0.05/lb to \$0.10/lb in June 2007 and to \$0.20/lb in April 2011. The Initial Export Share variable measures the share of production that was exported in the first year a mill is observed in the sample. Coefficients are reported with standard errors clustered at the mill-level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A18: The Effect of FT Certification on Quantity Sold Domestically and Internationally, Controlling for Initial Export Share

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable:					
	ln Domestic Quantity Sold		ln Export Quantity Sold		Export Quantity as a Fraction of Total Quantity Sold	
Fair Trade Certified, FTC	-0.350	-0.221	-0.098	-0.056	0.049	0.038
	(0.223)	(0.206)	(0.173)	(0.160)	(0.031)	(0.029)
FTC x Price Gap Indicator	0.740***		0.281		-0.061	
	(0.206)		(0.206)		(0.048)	
FTC x Price Gap (USD/lb)		1.540***		0.192		-0.150*
		(0.453)		(0.477)		(0.088)
Year FE	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y
Initial Share Exported x Price Gap	Y	Y	Y	Y	Y	Y
Observations	2,038	2,038	2,000	2,000	2,110	2,110
Number of clusters/mills	326	326	307	307	329	329
Mean of dep. variable	10.9	10.9	12.8	12.8	0.79	0.79
Std. dev. of dep. variable	2.3	2.3	2.1	2.1	0.25	0.25

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the natural logarithm of the total quantity (expressed in lbs) sold by a mill on the domestic market. The dependent variable in columns 3 and 4 is the natural logarithm of the total quantity (expressed in lbs) sold by a mill on the export market. The dependent variable in columns 5 and 6 is equal to the ratio of export quantity sold over total quantity sold. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from $1.20/lb to $1.25/lb in June 2008 and to $1.40/lb in April 2011. The Fair Trade premium was increased from $0.05/lb to $0.10/lb in June 2007 and to $0.20/lb in April 2011. The Initial Export Share variable measures the share of production that was exported in the first year a mill is observed in the sample. Coefficients are reported with standard errors clustered at the mill-level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A19: The Effect of FT Certification on Revenues, Controlling for Initial Export Share

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable:					
	ln Total Revenue		ln Domestic Revenue		ln Export Revenue	
Fair Trade Certified, FTC	-0.155	-0.091	-0.370	-0.238	-0.090	-0.041
	(0.155)	(0.139)	(0.237)	(0.220)	(0.170)	(0.156)
FTC x Price Gap Indicator	0.402**		0.803***		0.324	
	(0.198)		(0.218)		(0.205)	
FTC x Price Gap (USD/lb)		0.607		1.710***		0.285
		(0.451)		(0.503)		(0.474)
Year FE	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y
Initial Share Exported x Price Gap	Y	Y	Y	Y	Y	Y
Observations	2,110	2,110	2,038	2,038	2,000	2,000
Number of clusters/mills	329	329	326	326	307	307
Mean of dep. variable	13.12	13.12	10.83	10.83	13.10	13.10
Std. dev. of dep. variable	2.02	2.02	2.17	2.17	1.95	1.95

Notes: The table reports OLS estimates of equations (3) and (4). An observation is a mill-year. Each specification contains mill and year fixed effects. The dependent variable in columns 1 and 2 is the total revenue (expressed in USD) obtained by a mill in a given year and equals the sum of domestic and export revenue. The dependent variable in columns 3 and 4 is the natural logarithm of domestic revenue (expressed in USD) obtained by a mill in a given year. The dependent variable in columns 5 and 6 is the natural logarithm of export revenue (expressed in USD) obtained by a mill in a given year. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from \$1.20/lb to \$1.25/lb in June 2008 and to \$1.40/lb in April 2011. The Fair Trade premium was increased from \$0.05/lb to \$0.10/lb in June 2007 and to \$0.20/lb in April 2011. Coefficients are reported with standard errors clustered at the mill level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A20: The Effect of FT Certification when Excluding One FT-Certified Mill

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Interaction of FTC with Price Gap Indicator						Interaction of FTC with Price Gap (USD/b)					
	Baseline Estimate		Lower Bound		Upper Bound		Baseline Estimate		Lower Bound		Upper Bound	
Dependent Variable	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.
	Panel A: Table 3 Estimates: The Effect of FT Certification on Sales Prices											
Domestic Price (USD/lb)	0.055	(0.035)	0.034	(0.028)	0.075**	(0.030)	0.105	(0.079)	0.051	(0.059)	0.138*	(0.080)
ln Domestic Price	0.062	(0.038)	0.032	(0.022)	0.075*	(0.040)	0.180	(0.127)	0.072	(0.065)	0.207	(0.140)
Export Price (USD/lb)	0.075***	(0.022)	0.070***	(0.023)	0.083***	(0.021)	0.113*	(0.063)	0.085	(0.062)	0.142**	(0.062)
ln Export Price	0.041**	(0.020)	0.031*	(0.018)	0.049**	(0.019)	0.078	(0.102)	0.017	(0.091)	0.120	(0.105)
	Panel B: Table 4 Estimates: The Effect of FT Certification on Quantities Received and Sold by Mills											
ln Total Quantity Received	0.400**	(0.161)	0.318**	(0.145)	0.452***	(0.162)	0.829*	(0.438)	0.556	(0.352)	1.025**	(0.448)
ln Total Quantity Sold	0.381*	(0.199)	0.261	(0.169)	0.463**	(0.197)	0.589	(0.427)	0.276	(0.314)	0.773*	(0.436)
Fraction of Quantity Received that is Sold	-0.016**	(0.007)	-0.018***	(0.007)	-0.014**	(0.007)	0.044	(0.113)	-0.053	(0.034)	0.071	(0.128)
	Panel C: Table 5 Estimates: The Effect of FT Certification on Quantity Sold Domestically and Internationally											
ln Domestic Quantity Sold	0.737***	(0.203)	0.660***	(0.202)	0.801***	(0.202)	1.474***	(0.430)	1.201***	(0.359)	1.606***	(0.413)
ln Export Quantity Sold	0.289	(0.198)	0.199	(0.184)	0.381**	(0.193)	0.327	(0.420)	0.083	(0.364)	0.530	(0.419)
Export Quantity as a Fraction of Total Quantity Sold	-0.060	(0.044)	-0.087**	(0.035)	-0.038	(0.042)	-0.121	(0.075)	-0.162**	(0.064)	-0.093	(0.078)
	Panel D: Table 6 Estimates: The Effect of FT Certification on Revenues											
ln Total Revenue	0.400**	(0.201)	0.281	(0.170)	0.480**	(0.200)	0.618	(0.437)	0.317	(0.345)	0.819*	(0.439)
ln Domestic Revenue	0.799***	(0.215)	0.703***	(0.202)	0.867***	(0.215)	1.654***	(0.467)	1.385***	(0.416)	1.803***	(0.447)
ln Export Revenue	0.329*	(0.199)	0.241	(0.186)	0.430**	(0.189)	0.405	(0.431)	0.175	(0.394)	0.622	(0.425)
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mill FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Notes: The table reports OLS estimates of equations (3) in columns (1) through (6) and specification (4) in columns (7) through (12). An observation is a mill-year. Each specification contains mill and year fixed effects. The baseline estimates correspond to the estimates using the full sample, whereas the lower bound and upper bound estimates correspond to the lowest and highest estimates, respectively, when dropping one FT-certified mill from the sample and re-estimating the specifications. The Price Gap Indicator equals one in years in which the world price for Arabica coffee is below the Fair Trade minimum price. The Price Gap variable equals zero when the Price Gap Indicator is zero and equals the difference between the Fair Trade minimum price plus the premium and the world price for years when the Price Gap Indicator is equal to one. The Price Gap variable ranges from 0 to 0.66 USD/lb. The Fair Trade minimum price for washed Arabica coffee was increased from $1.20/lb to $1.25/lb in June 2008 and to $1.40/lb in April 2011. The Fair Trade premium was increased from $0.05/lb to $0.10/lb in June 2007 and to $0.20/lb in April 2011. Coefficients are reported with standard errors clustered at the mill level in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Additional Tables: Household Results

Table A21: The Effect of FT on Incomes by Industry and Occupation, Omitting Influential Observations

	Sample: All individuals 12 or older Dependent variable: ln (monthly income)			
	(1)	(2)	(3)	(4)
Fair Trade Intensity, FTI	0.019 (0.048)	0.013 (0.040)	-0.033 (0.044)	
FTI x Coffee		0.256*** (0.038)		
FTI x Skilled				-0.058 (0.042)
FTI x Unskilled				-0.008 (0.040)
FTI x Nonfarm				-0.025 (0.043)
FTI x Coffee x Skilled			0.652*** (0.124)	0.679*** (0.110)
FTI x Coffee x Unskilled			0.126** (0.050)	0.106* (0.058)
FTI x Coffee x Nonfarm			-0.181* (0.104)	-0.189* (0.104)
Age, age^2, gender & interactions	Y	Y	Y	Y
Education FE	Y	Y	Y	Y
79 Canton FE	Y	Y	Y	Y
9 Year FE	Y	Y	Y	Y
Canton-specific time trends	Y	Y	Y	Y
9,793 Industry x Occupation FE	N	N	Y	Y
461 Industry FE	Y	Y	N	N
Observations	132,372	132,350	126,819	126,732
Clusters	79	79	79	79

Notes: The unit of observation is an individual. The sample in each regression excludes highly influential observations as measured by each observations' cook's distance. Specifically, we omit observations whose cook's distance in the full sample regression model is greater than 4/N (where N is the sample size of the full sample regression). The full sample includes all individuals, who are 12 or older, and report positive income and an industry and occupation of employment. The dependent variable is the natural log of monthly income. The variable *Coffee* is equal to 1 if the individual's primary industry of employment is coffee cultivation. The variables *Skilled, Unskilled,* and *Nonfarm* equal one if an individual's primary occupation is skilled agricultural worker, unskilled agricultural worker, or other nonfarm occupation, respectively. All regressions include education FE, canton FE, year FE, and controls for age, age-squared, gender, gender x age, and gender x age-squared. Coefficients are reported with standard errors clustered at the canton level. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A22: The Effect of FT on Incomes by Industry, Occupation, and Share of Workers in Coffee

	Sample: All individuals 12 or older Dependent variable: ln (monthly income)			
	(1)	(2)	(3)	(4)
$\widehat{FTI}$	0.080	-0.119	-0.120	
	(0.442)	(0.413)	(0.387)	
$\widehat{FTI}$ x Coffee		0.685***		
		(0.252)		
$\widehat{FTI}$ x Skilled				-0.157
				(0.452)
$\widehat{FTI}$ x Unskilled				-0.172
				(0.382)
$\widehat{FTI}$ x Nonfarm				-0.107
				(0.435)
$\widehat{FTI}$ x Coffee x Skilled			1.100***	1.131**
			(0.390)	(0.527)
$\widehat{FTI}$ x Coffee x Unskilled			0.284	0.332
			(0.222)	(0.411)
$\widehat{FTI}$ x Coffee x Nonfarm			-0.752	-0.767
			(0.998)	(0.948)
Age, age^2, gender & interactions	Y	Y	Y	Y
Education FE	Y	Y	Y	Y
79 Canton FE	Y	Y	Y	Y
9 Year FE	Y	Y	Y	Y
Canton-specific time trends	Y	Y	Y	Y
9,793 Industry x Occupation FE	N	N	Y	Y
461 Industry FE	Y	Y	N	N
Observations	143,364	143,364	143,364	143,364
Clusters	79	79	79	79

Notes: The unit of observation is an individual. The sample includes all individuals, who are 12 or older, and report positive income and an industry and occupation of employment. The dependent variable is the natural log of monthly income. The variable *Coffee* is equal to 1 if the individual's primary industry of employment is coffee cultivation. The $\widehat{FTI}$ variable is the baseline Fair Trade Intensity measure interacted with share of a canton's individuals whose primary industry of employment is coffee cultivation each year. The variables *Skilled, Unskilled,* and *Nonfarm* equal one if an individual's primary occupation is skilled agricultural worker, unskilled agricultural worker, or other nonfarm occupation, respectively. All regressions include education FE, canton FE, year FE, and controls for age, age-squared, gender, gender x age, and gender x age-squared. Coefficients are reported with standard errors clustered at the canton level. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.

Table A23: The Effect of FT on Incomes: Robustness to Other Certifications

	Sample: All individuals 12 or older Dependent variable: ln (monthly income)			
	(1)	(2)	(3)	(4)
Fair Trade Intensity, FTI	-0.019	-0.029	-0.031	
	(0.067)	(0.064)	(0.057)	
FTI x Coffee		0.086		
		(0.089)		
FTI x Skilled				-0.106
				(0.067)
FTI x Unskilled				-0.033
				(0.057)
FTI x Nonfarm				-0.025
				(0.061)
FTI x Coffee x Skilled			0.288*	0.360**
			(0.156)	(0.156)
FTI x Coffee x Unskilled			-0.072	-0.074
			(0.082)	(0.091)
FTI x Coffee x Nonfarm			-0.259***	-0.266***
			(0.097)	(0.095)
Rainforest alliance intensity controls	Y	Y	Y	Y
Organic intensity controls	Y	Y	Y	Y
Age, age^2, gender & interactions	Y	Y	Y	Y
Education FE	Y	Y	Y	Y
79 Canton FE	Y	Y	Y	Y
9 Year FE	Y	Y	Y	Y
Canton-specific time trends	Y	Y	Y	Y
9,793 Industry x Occupation FE	N	N	Y	Y
461 Industry FE	Y	Y	N	N
Observations	143,364	143,364	143,364	143,364
Clusters	79	79	79	79

Notes: The unit of observation is an individual. The sample includes all individuals, who are 12 or older, and report positive income and an industry and occupation of employment. The dependent variable is the natural log of monthly income. The variable *Coffee* is equal to 1 if the individual's primary industry of employment is coffee cultivation. The variables *Skilled, Unskilled,* and *Nonfarm* equal one if an individual's primary occupation is skilled agricultural worker, unskilled agricultural worker, or other nonfarm occupation, respectively. All regressions include education FE, canton FE, year FE, and controls for age, age-squared, gender, gender x age, and gender x age-squared. All regressions control for export-weighted Rainforest Alliance and Organic Certification exposure equivalents of the FTI measure; these controls enter in the symmetric way as the FTI measure variables (including the interactions). Coefficients are reported with standard errors clustered at the canton level. ***, **, and * indicate significance at the 1, 5, and 10 percent levels.