

Online Appendix

Global Purchasing as Labor Regulation: The Missing Middle

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Table A.1. Logged Order Volumes and Labor Violations during the Business Relationship

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Average violations	0.0266 (0.0314)		0.0252 (0.0323)		0.0318 (0.0196)							
Top 50% viols. (binary)		0.798** (0.384)		0.803** (0.387)		0.651*** (0.226)						
Lagged average violations							0.0545 (0.0522)		0.0512 (0.0539)		0.0459*** (0.0167)	
Lagged top 50% viols. (binary)							0.948** (0.403)			0.947** (0.405)		0.571*** (0.170)
Average unit price			.00381*** (0.00102)	.00382*** (0.00103)	.00572*** (0.00188)	0.00577*** (0.00201)			.00288*** (0.000811)	.00318*** (0.000746)	.00524*** (0.00164)	.00549*** (0.00183)
Late delivery ratio			0.426 (0.417)	0.483 (0.406)	0.239 (0.299)	0.313 (0.288)			0.341 (0.373)	0.401 (0.352)	0.159 (0.241)	0.244 (0.226)
Audited? (binary)					0.107 (0.111)	0.0912 (0.116)					0.165 (0.119)	0.178 (0.119)
Purch. manager FE					✓	✓					✓	✓
Factory FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Season FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R-squared	0.061	0.071	0.066	0.076	0.822	0.826	0.060	0.068	0.063	0.072	0.832	0.833
Factories	91	91	91	91	91	91	89	89	89	89	89	89
Observations	496	496	496	496	496	496	435	435	435	435	435	435

Notes: Panel fixed-effects models of the natural log of total order volume (USD) in Active Inc. sourcing database. Violations are a time-varying measure within each factory, averaged within each season. Top 50% violations is a binary indicator of whether factory violations were greater than (1) or less than (0) the entire panel median during each season. Lagged indicators are lagged by one season. Robust standard errors clustered by factory in parentheses. FE, fixed effects.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table A.2. Order Quantities and Labor Violations during the Business Relationship

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Average violations	453.4 (319.9)		452.2 (321.3)		237.0 (274.2)							
Top 50% viols. (binary)		8,263** (3,580)		8,356** (3,587)		6,316** (2,990)						
Lagged average violations							955.8** (424.8)		954.4** (429.7)		797.5** (326.0)	
Lagged top 50% viols. (binary)								10,468** (4,242)		10,535** (4,242)		9,285*** (3,516)
Average unit price			1.995 (6.244)	2.827 (4.501)	2.844 (5.705)	3.194 (4.973)			-3.162 (9.129)	3.256 (4.673)	0.115 (7.283)	4.491 (4.747)
Late delivery ratio			4,169 (3,367)	4,771 (3,505)	5,421 (3,904)	6,070 (4,065)			5,456 (4,088)	6,278 (4,185)	6,588 (4,906)	8,000 (5,288)
Audited? (binary)					5,147** (2,368)	4,898** (2,328)					3,647* (2,149)	3,876* (2,159)
Purch. manager FE					✓	✓					✓	✓
Factory FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Season FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R-squared	0.039	0.053	0.040	0.056	0.178	0.188	0.061	0.058	0.065	0.062	0.220	0.222
Factories	91	91	91	91	91	91	89	89	89	89	89	89
Observations	496	496	496	496	496	496	435	435	435	435	435	435

Notes: Panel fixed-effects models of total order quantity (units) in Active Inc. sourcing database. Violations are a time-varying measure within each factory, averaged within each season. Top 50% violations is a binary indicator of whether factory violations were greater than (1) or less than (0) the entire panel median during each season. Lagged indicators are lagged by one season. Robust standard errors clustered by factory in parentheses. FE, fixed effects.

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Table A.3. Order Volumes and Labor Violations during the Business Relationship (Apparel Factories Only)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Average violations	52,909 (34,003)		52,578 (34,296)		37,593 (25,572)							
Top 50% viols. (binary)		619,483** (244,103)		610,750** (245,715)		494,074*** (172,177)						
Lagged average violations							94,471** (43,865)		97,057** (44,831)		85,500** (36,182)	
Lagged top 50% viols. (binary)								676,833* (335,829)		677,199* (335,039)		585,666** (239,624)
Average unit price			1,858 (7,103)	-76.35 (7,657)	887.4 (11,782)	-243.9 (11,646)			9,576 (8,393)	5,568 (6,499)	10,245 (13,911)	7,991 (13,930)
Late delivery ratio			471,601 (589,352)	391,547 (502,725)	475,390 (667,478)	386,311 (599,137)			1.087e+06 (759,658)	917,342 (586,491)	921,523 (823,287)	930,673 (735,481)
Audited? (binary)					84,506 (95,044)	73,671 (107,542)					25,638 (77,567)	55,911 (100,958)
Purch. manager FE					✓	✓					✓	✓
Factory FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Season FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R-squared	0.156	0.197	0.159	0.199	0.364	0.397	0.284	0.187	0.302	0.197	0.494	0.432
Factories	27	27	27	27	27	27	27	27	27	27	27	27
Observations	145	145	145	145	145	145	126	126	126	126	126	126

Notes: Panel fixed-effects models of total order volume (USD) for apparel factories in Active Inc. sourcing database. Violations are a time-varying measure within each factory, averaged within each season. Top 50% violations is a binary indicator of whether factory violations were greater than (1) or less than (0) the entire panel median during each season. Lagged indicators are lagged by one season. Robust standard errors clustered by factory in parentheses. FE, fixed effects.

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Table A.4. Order Volumes and Labor Violations during the Business Relationship (Month-Level Panel)

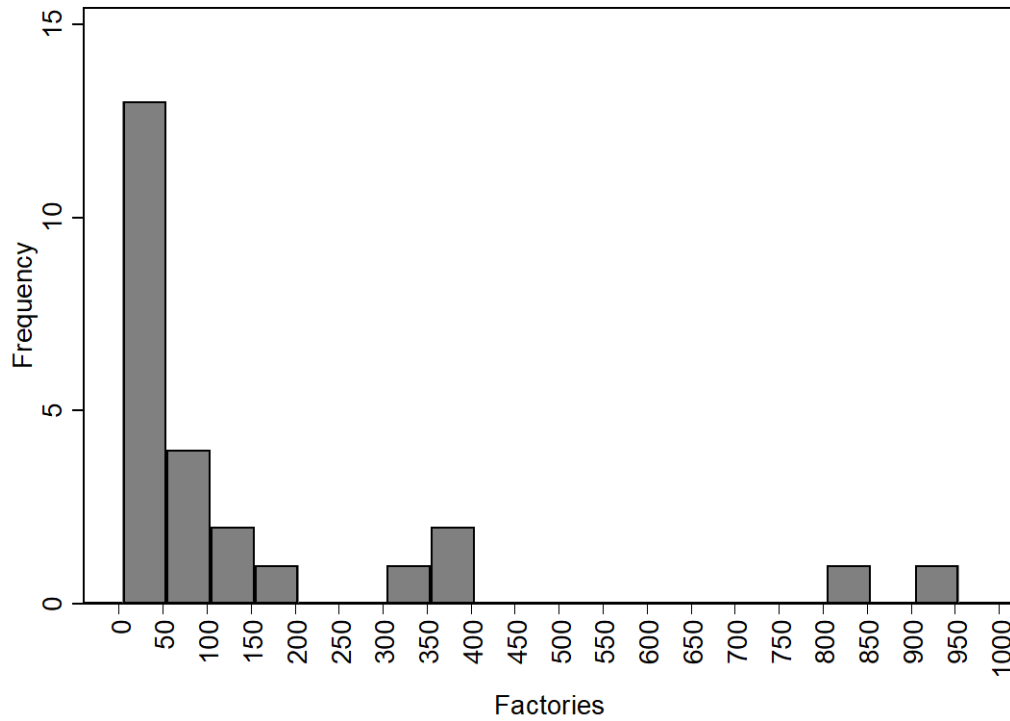
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Average violations	2,125* (1,204)		2,070* (1,204)		2,163* (1,115)							
Top 50% viols. (binary)		36,987** (14,324)		36,825** (14,277)		34,593*** (12,604)						
Lagged average violations							1,529 (1,276)		1,483 (1,282)		1,822 (1,173)	
Lagged top 50% viols. (binary)								28,513* (15,143)		28,136* (15,151)		31,011** (13,212)
Average unit price			79.59 (58.73)	86.11 (60.92)	85.23 (59.25)	91.42 (61.04)			79.52 (57.87)	82.04 (58.96)	86.47 (58.41)	88.76 (59.98)
Late delivery ratio			18,298* (10,942)	18,446* (10,735)	16,638* (9,623)	17,188* (9,493)			16,585 (10,466)	16,212 (10,338)	14,342 (9,254)	14,324 (9,191)
Audited? (binary)					16,847 (26,360)	14,439 (25,527)					22,440 (26,057)	24,471 (26,201)
Purch. manager FE					✓	✓					✓	✓
Factory FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Month FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observations	2,755	2,755	2,755	2,755	2,755	2,755	2,725	2,725	2,725	2,725	2,725	2,725
R-squared	0.074	0.076	0.075	0.077	0.251	0.252	0.073	0.074	0.074	0.075	0.252	0.253
Factories	91	91	91	91	91	91	90	90	90	90	90	90

Notes: Panel fixed-effects models of total order volume (USD) in Active Inc. sourcing database. Violations are a time-varying measure within each factory, averaged within each month. Top 50% violations is a binary indicator of whether factory violations were greater than (1) or less than (0) the entire panel median during each season. Lagged indicators are lagged by one season. Robust standard errors clustered by factory in parentheses. FE, fixed effects.

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Active and Other Brands Engaged in Private Regulation

Figure A.1. Supply Chain Size among Fair Labor Association Buyers



Notes: The graph shows the distribution of supply chain sizes, in number of factories, of Fair Labor Association–accredited buyers. The median number of factories is 51. Active Inc. is slightly higher than this, with approximately 70.