# **For Online Publication Only**

# PARTICIPATION, GOVERNMENT LEGITIMACY, AND REGULATORY COMPLIANCE IN EMERGING ECONOMIES: A FIRM-LEVEL FIELD EXPERIMENT IN VIETNAM

#### WEB APPENDIX

Appendix	Page
A: Outcomes of Online Posting of Drafts on VIB Online, by Ministry	В
B: Firm Population to Firm Sample (B1: Full Sample, B2: Province, B3: Comparison)	D
C: Evolution of Clauses in Hazardous Chemical Regulation	G
D: Balance in Covariates	Н
E: Compliance by Clause	Ι
F: Effect of Experiment on Individual Clauses (Full Regression Results)	J
(F1: OLS; F2: Probit; F3: OLS in high access districts)	
G: Benjamini-Hochberg Multiple Comparisons Correction	Μ
H: Criteria for Selecting Regulation	Ν
I: Information and Sensitivity Tests Related to Table 2 in Manuscript	0
• 11. Replication of Table 2 Using Ordinary Least Squares (P)	
• <i>I2. Replication of Table 2 using Original Treatment Conditions (Q)</i>	
• <i>I3. Regulatory Quality as Alternative Measure of Legitimacy (R)</i>	
• 14. Sample Restricted to Firms Not Providing Substantive Comments (S)	
J. Information and Sensitivity Tests Related to Table 4 in Manuscript	Т
• J1. Replication of Table 4 Using Ordinary Least Squarest Analysis (U)	
• J2. Replication of Table 4 Controlling for Baseline Legitimacy (V)	
• J3. Replication of Table 4 using Original Treatment Conditions (W)	
K. Information and Sensitivity Tests Related to Table 5 in Manuscript	Х
• K1. Replication of Table 5 Controlling for Baseline Legitimacy (Y)	
• K2. Replication of Table 5 using Original Treatment Conditions (Z)	
L. Replication <u>Tables 4 and 5</u> Dropping Auditors with Problems Obtaining Factory Access	AA
M. Differentiating Legitimacy from Learning (Effect of Response Report on Information	BB
Group)	
N. Heterogenous Treatment Effects by Size	CC
• N1. Regression Table (DD)	
• N2. Graph of Marginal Effects (EE)	
O. Test of Substantive Change by Controlling for Responders	FF

Name of Ministry	Total Legal, Normative Documents Issued	Posted Online	Share Posted for Online Comment	Delay in Posting Laws & Decrees Online (Difference in Months between Date in Legislative Calenadar and Actual Posting)	Delay in Posting Circulars Online (Difference in Months between Date in Legislative Calenadar and Actual Posting)	Formally Defined Time Frame for Online Comment	Formal days for Online Comment
Ministry of Trade and							
Industry	55	36	65.5%	6.71	3.81	Yes	60
Ministry of		_					
Transportation	75	8	10.7%	11.2	5.58	No	
Ministry of Planning	10	ſ	46.20/	11.05	0.02	N	
and Investment	13	6	46.2%	11.05	9.82	NO	
Technology	34	13	38.2%	8 83	8 4 3	Ves	25
Ministry of Labor, War	51	15	50.270	0.00	0.15	105	25
Invalids and Social							
Affairs	40	24	60.0%	5.18	5.96	No	
Ministry of Agriculture							
and Rural Development	74	10	13.5%	9.11	4.73	No	
Ministry of Finance	174	106	60.9%	6.96	5.55	No	
Ministry of Natural							
Resources and	10	10	20.20/	054	4 74	N	
Environment Ministry of Information	43	13	30.2%	8.54	4./1	No	
and Communications	26	21	59 206	7.02	7.02	No	
Ministry of Justice	10	21	70.00/	6.66	7.02	No	
Ministry of Culture	10	/	70.0%	0.00	5.50	INO	
Sports and Tourism	15	3	20.0%	8.43	4.22	Yes	60
Ministry of	10	U	2010/0	0.10		100	
Construction	14	6	42.9%	9.69	10.34	Yes	60
Ministry of Health	37	3	8.1%	9.85	8.71	Yes	60
State Bank of Vietnam	42	0	0.0%	8.32	8.33	No	
Average	662	256	38.7%	8.40	6.63		53

## Appendix A1: Online Posting of Legal Documents According to Vietnam's Law on Laws, by Ministry

Sources: Vietnam Chamber of Commerce and Industry (2012). Report on the Ministry Effeciency Index. Hanoi, Vietnam (p. 70 and 74). <a href="http://mei.vibonline.com.vn/Home/AboutUs.aspx">http://mei.vibonline.com.vn/Home/AboutUs.aspx</a>

Name of Ministry	Average Page Views per Document	Total VCCI Comments	VCCI Comments Fully Accepted by Drafing Committee	VCCI Comments Partially Accepted by Drafing Committee	VCCI Comments NOT Accepted by Drafing Committee	Publically Released Table of Responses	Share of Drafts Passed into Legislation
Ministry of Trade and							
Industry	637.7	75	9.3%	17.3%	73.3%	0%	100%
Ministry of	(())	10	26.00/	15 00/	47 40/	00/	1000/
Ministry of Planning	660.9	19	30.8%	15.8%	47.4%	0%	100%
and Investment	683.1	11	18.2%	27.3%	54.5%	0%	100%
Ministry of Science and	00012		20.270	271070	0 110 / 0	070	20070
Technology	636.5					0%	100%
Ministry of Labor, War							
Invalids and Social						00/	1000/
Affairs Ministry of Agriculture	/8/./					0%	100%
and Rural Development	753.0		50.0%	7 1%	42 9%	0%	100%
Ministry of Finance	622.1	154	38.3%	14.9%	16.9%	0%	100%
Ministry of Natural	022.1	134	50.570	14.770	40.070	070	10070
Resources and							
Environment	708.4	42	38.1%	11.9%	50.0%	0%	100%
Ministry of Information							
and Communications	753.7					0%	100%
Ministry of Justice	631.0					0%	100%
Ministry of Culture,	(25)	20	(2.20)	<b>F</b> 00/	20.00/	00/	1000/
Sports and Tourism	627.9	38	63.2%	7.9%	28.9%	0%	100%
Construction	740 3	7	28.6%	28.6%	42 9%	0%	100%
Ministry of Health	698.0	, 27	14 7%	18 5%	40.7%	0%	100%
State Bank of Vietnam	699.0	27	17.7 /0	10.3 /0	10.770	0%	100%
	674.2	415	25.00/	14 50/	40.60/	0%	100%
Average	0/4.3	413	33.7%	14.3%	47.0%	U%0	100%0

#### Appendix A2: Outcomes of Online Posting of Drafts on VIB Online, by Ministry

Sources: Vietnam Chamber of Commerce and Industry (2012). Report on the Ministry Effeciency Index. Hanoi, Vietnam. Web scraping of VIB online website for page views <a href="http://www.vibonline.com.vn/Duthao/default.aspx">http://www.vibonline.com.vn/Duthao/default.aspx</a>. Conducted on April 21, 2014. Vietnam Chamber of Commerce Legal Department. 2013. "Evaluation of Ministerial Response to Comments." Internal Review for VCCI Chairman Vu Tien Loc. Jan. 2014. (VCCI shared this report with researchers)<a href="http://mei.vibonline.com.vn/Home/AboutUs.aspx">http://mei.vibonline.com.vn/Home/AboutUs.aspx</a>>

## **Appendix B1: Firm Population to Firm Sample Screening Tree**



Phases		Hanoi	Bac Ninh	Hai Duong	Hung Yen	Vinh Phuc	Phu Tho
1: nal	Firms under hazardous chemical codes	11,369	884	786	556	360	638
tep rigii	Without contact number	3,071	38	20	29	12	8
s Q s	With contact numbers	8,298	846	766	527	348	630
		Firms with	h contact nı	ımbers			
g of	Number inactive	1,768	304	212	137	102	200
nin IS	Bankruptcy or not operating yet	2,622	28	37	29	25	34
ree irm	Not accepting calls after 6 trials	37	238	168	118	95	181
e Sc al F	Active firms	3,871	276	349	243	126	215
none mic	Of all active firms						
o 2: Ph Chei	Not involving hazardous chemicals	1,824	41	70	38	22	84
Stel	Refuse to participate	830	20	23	28	4	7
	Involving hazardous chemicals	1217	215	256	177	104	124
3: lin	All active firm	ns whose busii	ness involvir	ng hazardous	chemicals		
ep. edu	Accepted	556	88	127	86	52	56
Sch P	Refuse	661	127	129	91	52	68
<b>Respons</b>	<u>se rate</u>	27%	37%	46%	42%	48%	43%
Phases		Thai Nguyen	Ninh Binh	Hai Phong	Nam Dinh	Ha Nam	TOTAL
Phases	Firms under hazardous chemical codes	Thai Nguyen 456	Ninh Binh 374	Hai Phong 2,376	Nam Dinh 626	Ha Nam 276	<b>TOTAL</b> 18,701
by the provided th	<b>Firms under hazardous</b> <b>chemical codes</b> Without contact number	Thai Nguyen 456 3	Ninh Binh 374 374	Hai Phong 2,376 1,077	Nam     Dinh     626     10	Ha Nam 276 5	<b>TOTAL</b> 18,701 4,647
Step 1: Original Sample	<b>Firms under hazardous</b> <b>chemical codes</b> Without contact number With contact numbers	Thai     Nguyen     456     3     453	Ninh Binh 374 374 374	Hai Phong 2,376 1,077 1,299	Nam Dinh 626 10 616	Ha Nam 276 5 271	<b>TOTAL</b> 18,701 4,647 14,428
f Step 1: Original Sample	<b>Firms under hazardous</b> <b>chemical codes</b> Without contact number With contact numbers	Thai Nguyen 456 3 453 Firms with	Ninh Binh 374 374 374 h contact nu	Hai     Phong     2,376     1,077     1,299     umbers	Nam     Dinh     626     10     616	Ha Nam 276 5 271	<b>TOTAL</b> 18,701 4,647 14,428
g of Step 1: Original Sample	<b>Firms under hazardous</b> <b>chemical codes</b> Without contact number With contact numbers Number inactive	Thai Nguyen 456 3 453 Firms with 140	Ninh Binh 374 374 374 4 contact nu 134	Hai     Phong     2,376     1,077     1,299     umbers     437	Nam Dinh 626 10 616 188	Ha Nam 276 5 271 64	TOTAL     18,701     4,647     14,428     3,686
ning of Step 1: by a consistent of Step 2: by Criginal Sample Sample Sample Step 2: by S	Firms under hazardous chemical codesWithout contact numberWith contact numbersNumber inactive Bankruptcy or not operating yet	Thai Nguyen     456     3     453     Firms with     140     19	Ninh Binh 374 374 374 h contact nu 134 25	Hai     Phong     2,376     1,077     1,299     umbers     437     65	Nam Dinh 626 10 616 	Ha Nam 276 5 271 64 2	TOTAL 18,701 4,647 14,428 3,686 2,901
rreening of Step 1: Hereing Step 2: Step 2: Step 2: Step 3: St	Firms under hazardous chemical codesWithout contact numberWith contact numbersNumber inactiveBankruptcy or not operating yetNot accepting calls after 6 trials	Thai Nguyen     456     3     453     Firms with     140     19     106	Ninh Binh 374 374 374 4 contact nu 134 25 86	Hai     Phong     2,376     1,077     1,299     umbers     437     65     342	Nam Dinh 626 10 616 188 15 208	Ha Nam 276 5 271 64 2 108	<b>TOTAL</b> 18,701 4,647 14,428 3,686 2,901 1,687
e Screening of Step 1: He Step 2: Step 2: Step 3: Sample search Sample s	Firms under hazardous   chemical codes   Without contact number   With contact numbers   Number inactive   Bankruptcy or not operating yet   Not accepting calls after 6 trials   Active firms	Thai Nguyen     456     3     453     Firms with     140     19     106     187	Ninh Binh 374 374 374 h contact nu 134 25 86 129	Hai     Phong     2,376     1,077     1,299     umbers     437     65     342     455	Nam     Dinh     626     10     616     1     188     15     208     205	Ha Nam 276 5 271 64 2 108 97	TOTAL 18,701 4,647 14,428 3,686 2,901 1,687 6,153
hone Screening of Step 1: Hore Step 1: Control of Step 1: Step	Firms under hazardous chemical codesWithout contact numberWith contact numbersWith contact numbersNumber inactiveBankruptcy or not operating yetNot accepting calls after 6 trialsActive firmsOf all active firms	Thai Nguyen     456     3     453     Firms with     140     19     106     187	Ninh Binh 374 374 374 4 contact nu 134 25 86 129	Hai     Phong     2,376     1,077     1,299     ambers     437     65     342     455	Nam Dinh 626 10 616 188 15 208 205	Ha Nam 276 5 271 64 2 108 97	<b>TOTAL</b> 18,701 4,647 14,428 3,686 2,901 1,687 6,153
p 2: Phone Screening of Step 1: 4d Chemical Firms Original see Sample s	Firms under hazardous chemical codesWithout contact numberWith contact numbersWith contact numbersNumber inactiveBankruptcy or not operating yetNot accepting calls after 6 trialsActive firmsOf all active firmsNot involving hazardous chemicals	Thai Nguyen     456     3     453     Firms with     140     19     106     187     74	Ninh Binh 374 374 374 4 374 4 25 86 129 45	Hai     Phong     2,376     1,077     1,299     ambers     437     65     342     455     239	Nam Dinh 626 10 616 188 15 208 205 205 77	Ha Nam 276 5 271 64 2 108 97 36	TOTAL 18,701 4,647 14,428 3,686 2,901 1,687 6,153 2,550
Step 2: Phone Screening of Step 1: 4d Chemical Firms Original see sample se	Firms under hazardous chemical codesWithout contact numberWith contact numbersWith contact numbersNumber inactiveBankruptcy or not operating yetNot accepting calls after 6 trialsActive firmsOf all active firmsNot involving hazardous chemicalsRefuse to participate	Thai Nguyen     456     3     453     Firms with     140     19     106     187     74     7	Ninh Binh 374 374 374 4 7 86 129 45 7	Hai     Phong     2,376     1,077     1,299     ambers     437     65     342     455     239     20	Nam Dinh 626 10 616 188 15 208 205 205 777 17	Ha Nam 276 5 271 64 2 108 97 36 36	TOTAL 18,701 4,647 14,428 3,686 2,901 1,687 6,153 2,550 972
Step 2: Phone Screening of Step 1: 4d Chemical Firms Original see Sample se	Firms under hazardous chemical codesWithout contact numberWith contact numbersWith contact numbersNumber inactiveBankruptcy or not operating yetNot accepting calls after 6 trialsActive firmsOf all active firmsNot involving hazardous chemicalsRefuse to participateInvolving hazardous chemicals	Thai Nguyen     456     3     453     Firms with     140     19     106     187     74     7     106	Ninh Binh 374 374 374 4 27 86 129 45 7 77	Hai     Phong     2,376     1,077     1,299     umbers     437     65     342     455     239     20     196	Nam Dinh 626 10 616 188 15 208 205 205 77 77 17	Ha Nam 276 5 271 64 2 108 97 36 97 36 9	TOTAL 18,701 4,647 14,428 3,686 2,901 1,687 6,153 2,550 972 2,635
3: Step 2: Phone Screening of Step 1: 4d te Chemical Firms Original se ulin Sample s	Firms under hazardous   chemical codes   Without contact number   With contact numbers   With contact numbers   Number inactive   Bankruptcy or not operating yet   Not accepting calls after 6 trials   Active firms   Of all active firms   Not involving hazardous   chemicals   Refuse to participate   Involving hazardous chemicals   All active firms	Thai Nguyen     456     3     453     Firms with     140     19     106     187     74     7     106     3	Ninh Binh 374 374 374 4 374 134 25 86 129 45 45 7 7 77	Hai Phong 2,376 1,077 1,299 437 65 342 435 342 455 239 20 196	Nam Dinh 626 10 616 188 15 208 205 77 17 17 111 chemicals	Ha Nam 276 5 271 64 2 108 97 36 97 36 9 52	TOTAL 18,701 4,647 14,428 3,686 2,901 1,687 6,153 2,550 972 2,635
tep 3: Step 2: Phone Screening of Step 1: 4 hone Chemical Firms Original se edulin Sample s	Firms under hazardous   chemical codes   Without contact number   With contact numbers   With contact numbers   Number inactive   Bankruptcy or not operating yet   Not accepting calls after 6 trials   Active firms   Of all active firms   Not involving hazardous   chemicals   Refuse to participate   Involving hazardous chemicals   All active firm   Accepted	Thai Nguyen     456     3     453     Firms with     140     19     106     187     74     7     106     ns whose busin     52	Ninh Binh 374 374 374 4 374 134 25 86 129 45 7 7 77 ness involvin 32	Hai     Phong     2,376     1,077     1,299     abers     437     65     342     455     239     20     196     ag hazardous     75	Nam Dinh     626     10     616     188     15     208     205     77     17     111     chemicals     50	Ha Nam 276 5 271 64 2 108 97 36 97 36 9 52	TOTAL 18,701 4,647 14,428 3,686 2,901 1,687 6,153 2,550 972 2,635 1,200
Step 3:Step 2: Phone Screening ofStep 1:HdPhoneChemical FirmsOriginalSecuritySchedulinSampleSample	Firms under hazardous   chemical codes   Without contact number   With contact numbers   With contact numbers   Number inactive   Bankruptcy or not operating yet   Not accepting calls after 6 trials   Active firms   Of all active firms   Not involving hazardous   chemicals   Refuse to participate   Involving hazardous chemicals   All active firms   Accepted   Refuse	Thai Nguyen     456     3     453     Firms with     140     19     106     187     74     7     106     swhose busin     52     54	Ninh Binh 374 374 374 4 374 4 25 86 129 45 7 7 77 77 ness involvin 32 45	Hai     Phong     2,376     1,077     1,299     ambers     437     65     342     455     239     20     196     ag hazardous     75     121	Nam Dinh     626     10     616     188     15     208     205     77     17     111     chemicals     50     61	Ha Nam 276 5 271 64 2 108 97 36 97 36 9 52 26 26 26	TOTAL 18,701 4,647 14,428 3,686 2,901 1,687 6,153 2,550 972 2,550 972 2,635 1,200 1,435

## Appendix B2: Firm Population to Firm Sample, by Province

	Appendix B3: Sam	ple Selection Bi	as From Non-Resp	onse
--	------------------	------------------	------------------	------

Indianton	<u>Responder</u>	<u>its (n=1200)</u>	Non-Respond	<u>lents (n=1435)</u>	Diffe	rence
Indicator	Mean	SE	Mean	SE	Mean	SE
Firm in Hanoi=1	0.422	(0.0149)	0.514	(0.0125)	-0.0925***	(0.0195)
Capital Size Billion VND (ln)	1.381	(0.0355)	1.585	(0.0333)	-0.204***	(0.0420)
Total Employees (ln)	2.479	(0.0332)	2.594	(0.0311)	-0.115***	(0.0387)
Capital Labor Ratio (ln)	10.39	(0.136)	10.23	(0.128)	0.167	(0.161)
Male=1	0.879	(0.0133)	0.841	(0.0125)	0.0380**	(0.0154)
Joint Stock Company=1	0.249	(0.0150)	0.225	(0.0141)	0.0241	(0.0174)
LLC=1	0.269	(0.0157)	0.272	(0.0148)	-0.00336	(0.0183)
Sole Propietorship=1	0.325	(0.0167)	0.373	(0.0157)	-0.0480**	(0.0196)
Manufacturing=1	0.751	(0.0154)	0.726	(0.0145)	0.0246	(0.0177)
Woord Products=1	0.195	(0.0115)	0.203	(0.0101)	-0.00767	(0.0153)
Paper Products =1	0.110	(0.0108)	0.118	(0.0102)	-0.00844	(0.0124)
Chemical Manufacturing=1	0.0837	(0.0107)	0.0784	(0.0101)	0.00525	(0.0124)
Metal Products=1	0.253	(0.0117)	0.227	(0.0110)	0.0254*	(0.0134)
Transport=1	0.116	(0.00857)	0.123	(0.00807)	-0.00622	(0.00987)

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

	•				
Safe	ety Clause	<b>Received Comments</b>	Revised	In Final Draft	Audited
1	Storage/Fire Prevention	Yes	Yes	Yes	Yes
2	Aquaphobic Chemicals	Yes	Yes	No	No
3	Safety Signs	Yes	No	Yes	Yes
4	Lightning Prevention	Yes	Yes	Yes	Yes
5	Washing Facility	Yes	Yes	Yes	Yes
6	Chemical Transport	Yes	Yes	Yes	Yes
7	Fuses/Sockets	Yes	No	Yes	Yes
8	Lighting System	Yes	No	Yes	Yes
9	Mixing Equipment	Yes	Yes	Yes	Yes
10	Welding Equipment	Yes	Yes	Yes	Yes
11	Corrosive Chemicals	Yes	Yes	Yes	Yes
In ho	azardous chemical regulation b	ut not part of Round 1 Treat	ment		
12	Wastewater Treatment	No	No	Yes	Yes
13	Chemical Stacks	No	No	Yes	Yes
In se	parate fire safety regulation				
14	Fire Alarm	No	No	No	Yes
15	Fire Safety Equipment	No	No	No	Yes

#### **Appendix C: Evolution of Clauses in Hazardous Chemical Regulation**

Diamond indicates clauses was included in the stage. X indicates the clause was dropped or was not included.

There are two important points to note. First, Clause 2, which related to aquaphobic chemicals, was dropped from the final version of the draft regulation due to the complexity of monitoring. As a result, 10 clauses were present in both the baseline and endline rounds. Secondly, in addition to these 10 clauses, we instructed auditors to monitor compliance on four additional items. The first two were from the same hazardous chemicals regulation, but had not been included among the 11 described in our information treatment. The second two were from a separate regulation on fire safety, written by a separate government agency. These were added to examine the possibility that the compliance benefits of participation could spill over into other regulatory arenas. We found no evidence of compliance spillover into clauses not mentioned at baseline and so do not dwell on them in the results.

In three cases, firm comments contributed directly to the change in the draft. These included: 1) clarification of the type and use of chemical showers and taps outside of storehouses in Clause 4; 2) addition of protective barriers as shields between reactive chemicals in Clause 9; and 3) improved explanation of what "operator position" means in Clause 11. In the other cases, clauses were changed by the drafting committee either of its own accord or in response to the opinions of other government experts. Notably, this was the case for the weakening of Clause 10, which reduced the minimum distance between mechanical equipment and flammable chemicals from 20 meters to 15 meters. A T2 firm actually did request that the 20-meter requirement be revised to allow for a reduced distance in cases where there was also a wall divider, but the committee made an explicit decision to include the reduction without this key contingency.

### **Appendix D: Balance in Covariates**

		<u>C:</u>	<u>Placebo</u>	<u>T1: I</u> 1	<u>nformation</u>	<u>T2: Pa</u>	<u>articipation</u>	<u>Differe</u>	ence in Me	an Tests	<u>Obs.</u>
Cova	ariates/Treatment Group						-		(p-value	)	
	,,	Mean	90% CI	Mean	90% CI	Mean	90% CI	C v. T1	C v. T2	T1 v. T2	
	Successfully re-interviewed in										
(1)	Round 3=1	0.683	(0.644 - 0.722)	0.695	(0.651 - 0.739)	0.696	(0.663 - 0.730)	0.739	0.668	0.967	1,200
(2)	Able to vist in factory floor=1	0.600	(0.551 - 0.649)	0.580	(0.525 - 0.636)	0.661	(0.619 - 0.703)	0.665	0.120	0.058	830
	Respondent was CEO/General										
(3)	Manager=1	0.694	(0.646 - 0.743)	0.620	(0.565 - 0.674)	0.633	(0.592 - 0.675)	0.100	0.114	0.741	830
(4)	CEO of company is female=1	0.140	(0.102 - 0.177)	0.161	(0.118 - 0.204)	0.186	(0.154 - 0.218)	0.537	0.122	0.439	830
(5)	Firm is located in Hanoi=1	0.487	(0.436 - 0.537)	0.449	(0.391 - 0.506)	0.444	(0.401 - 0.488)	0.413	0.295	0.921	830
	Firm is located in rural sub-										
(6)	district=1	0.343	(0.295 - 0.392)	0.337	(0.282 - 0.392)	0.361	(0.320 - 0.403)	0.878	0.647	0.557	830
(7)	Employment Size (8pt scale)	2.713	(2.614 - 2.813)	2.732	(2.619 - 2.845)	2.767	(2.681 - 2.852)	0.840	0.502	0.685	830
(8)	<5 employees	0.113	(0.081 - 0.146)	0.122	(0.085 - 0.159)	0.119	(0.091 - 0.147)	0.771	0.812	0.929	830
(9)	5-9 employees	0.287	(0.243 - 0.330)	0.229	(0.180 - 0.279)	0.219	(0.182 - 0.257)	0.150	0.053	0.794	830
(10)	10-49 employees	0.419	(0.368 - 0.469)	0.473	(0.416 - 0.530)	0.481	(0.437 - 0.524)	0.242	0.127	0.866	830
(11)	>50 employees	0.181	(0.142 - 0.220)	0.176	(0.131 - 0.220)	0.181	(0.147 - 0.214)	0.877	0.985	0.883	830
	Change in employment between				(-0.030 -						
(12)	surveys (ln)	0.133	(0.004 - 0.263)	0.117	0.264)	0.177	(0.066 - 0.289)	0.890	0.670	0.589	830
	Performance of business between										
(13)	surveys (5pt scale)	3.669	(3.571 - 3.767)	3.845	(3.734 - 3.956)	3.724	(3.638 - 3.809)	0.051	0.491	0.153	797
(14)	Capital Size (8pt scale)	3.328	(3.206 - 3.450)	3.302	(3.164 - 3.441)	3.311	(3.206 - 3.416)	0.818	0.860	0.935	830
(15)	<0.5 Billion VND (\$23,000)	0.034	(0.011 - 0.057)	0.063	(0.037 - 0.090)	0.069	(0.049 - 0.089)	0.171	0.058	0.766	830
(16)	0.5 to 1 Billion VND (\$46,000)	0.121	(0.087 - 0.154)	0.122	(0.084 - 0.160)	0.131	(0.102 - 0.159)	0.969	0.715	0.767	830
(17)	1 to 5 Billion VND (\$230,000)	0.532	(0.481 - 0.583)	0.502	(0.445 - 0.560)	0.483	(0.440 - 0.527)	0.525	0.229	0.663	830
(18)	5 to 10 Billion VND (\$460,000)	0.147	(0.112 - 0.182)	0.127	(0.087 - 0.166)	0.133	(0.104 - 0.163)	0.525	0.619	0.829	830
	10 to 50 Billion VND (\$2.3										
(19)	Million)	0.166	(0.127 - 0.205)	0.185	(0.141 - 0.229)	0.183	(0.150 - 0.217)	0.588	0.577	0.952	830
(20)	Capital/Labor	1.342	(1.284 - 1.399)	1.299	(1.233 - 1.365)	1.294	(1.245 - 1.344)	0.422	0.308	0.929	830
(21)	Manufacturing Sector=1	0.758	(0.714 - 0.803)	0.673	(0.622 - 0.724)	0.742	(0.703 - 0.780)	0.039	0.639	0.078	830
(22)	Wood products=1	0.208	(0.167 - 0.248)	0.185	(0.140 - 0.231)	0.189	(0.155 - 0.223)	0.547	0.561	0.919	830
(23)	Metal products=1	0.166	(0.128 - 0.204)	0.141	(0.098 - 0.185)	0.194	(0.162 - 0.227)	0.484	0.353	0.109	830
(24)	Paper products=1	0.075	(0.048 - 0.103)	0.073	(0.042 - 0.104)	0.083	(0.060 - 0.107)	0.927	0.718	0.666	830
(25)	Chemical manufacuring=1	0.087	(0.057 - 0.116)	0.093	(0.059 - 0.126)	0.097	(0.072 - 0.122)	0.828	0.658	0.858	830
(26)	Chemical Transport=1	0.030	(0.012 - 0.048)	0.049	(0.028 - 0.069)	0.025	(0.010 - 0.040)	0.260	0.718	0.126	830
(27)	Sole Propiertorship=1	0.091	(0.059 - 0.122)	0.122	(0.086 - 0.158)	0.111	(0.084 - 0.138)	0.525	0.413	0.689	830
(28)	Limited Liability Company=1	0.596	(0.546 - 0.646)	0.590	(0.534 - 0.647)	0.581	(0.538 - 0.623)	0.896	0.695	0.822	830
(29)	Joint Stock Company=1	0.313	(0.267 - 0.360)	0.288	(0.235 - 0.341)	0.308	(0.268 - 0.348)	0.554	0.896	0.611	830
	Round 1: Understanding of										
(30)	regulation*	2.494	(2.432 - 2.556)	2.553	(2.482 - 2.624)	2.499	(2.446 - 2.551)	0.301	0.927	0.310	780
	Round 1: Regulations used to										
(31)	extract bribes*	2.531	(2.466 - 2.596)	2.443	(2.369 - 2.518)	2.564	(2.508 - 2.620)	0.145	0.524	0.033	756

\* Round 1 survey questions coded 1) Strongly Disagree; 2) Disagree; 3) Agree; 4) Strongly Agree. (30) "Government officials have sufficient understanding of business like this one to effectively carry out their regulatory duties." (31) "It is common for government officials to use regulations to extract rents from businesses in my industry."

# Appendix E: Compliance by Clause



90% Confidence Intervals; n=Eligible Firms

Dependent variable: Auditors rate firm in compliance with clause =1	Fire Prevention	Safety Signs	Lightning Prevention	Washing Facility	Chemical Transport	Fuses/ Sockets	Lighting System	Mixing Equipment	Welding Equipment	Corrosive Chemicals
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Information Treatment=1	0.021	-0.039	-0.028	-0.043	-0.044	-0.006	-0.085***	0.038	-0.041	-0.047
	(0.026)	(0.037)	(0.032)	(0.045)	(0.057)	(0.050)	(0.025)	(0.078)	(0.073)	(0.040)
Participation Treatment=1	0.034	0.020	0.108***	0.109***	0.005	0.004	0.061***	0.053	0.092	0.080*
	(0.028)	(0.046)	(0.034)	(0.034)	(0.031)	(0.042)	(0.022)	(0.062)	(0.063)	(0.042)
Hanoi=1	-0.069	-0.149***	-0.120	-0.108	-0.028	-0.067	-0.001	-0.139**	-0.129**	-0.068
	(0.080)	(0.037)	(0.072)	(0.066)	(0.025)	(0.052)	(0.034)	(0.056)	(0.055)	(0.051)
Female CEO=1	-0.084*	-0.146***	-0.201***	-0.175***	-0.042	-0.178***	-0.004	-0.095*	-0.166***	-0.031
	(0.045)	(0.046)	(0.055)	(0.053)	(0.035)	(0.043)	(0.021)	(0.049)	(0.035)	(0.041)
Constant	0.186***	0.171**	0.390***	0.432***	0.056	0.275***	0.008	0.063	-0.056	0.128
	(0.055)	(0.070)	(0.076)	(0.071)	(0.057)	(0.051)	(0.034)	(0.089)	(0.078)	(0.096)
Size FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	786	468	598	699	263	689	689	259	373	301
Clusters	48	41	45	47	29	46	46	11	33	27
R-Squared	0.056	0.113	0.106	0.085	0.018	0.084	0.034	0.068	0.105	0.024
RMSE	0.468	0.455	0.469	0.482	0.279	0.455	0.288	0.414	0.424	0.348

### Appendix F1: Effects of Experiment on Individual Clauses (OLS)

Linear probability model (OLS) with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). Estimating equations 5, 6, and 10 drop firms in the participation treatment that provided comments.

Dependent variable: Auditors rate firm in compliance with clause =1	Fire Prevention	Safety Signs	Lightning Prevention	Washing Facility	Chemical Transport	Fuses/ Sockets	Lighting System	Mixing Equipment	Welding Equipment	Corrosive Chemicals
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Information Treatment=1	0.023	-0.037	-0.032	-0.047	-0.039	-0.005	-0.105***	0.049	-0.037	-0.050
	(0.027)	(0.041)	(0.035)	(0.048)	(0.053)	(0.051)	(0.039)	(0.076)	(0.079)	(0.049)
Participation Treatment=1	0.036	0.018	0.118***	0.117***	0.005	0.004	0.075**	0.050	0.101	0.083*
	(0.029)	(0.051)	(0.037)	(0.037)	(0.033)	(0.043)	(0.032)	(0.059)	(0.068)	(0.047)
Hanoi=1	-0.071	-0.164***	-0.128*	-0.114	-0.028	-0.071	0.002	-0.151***	-0.152**	-0.068
	(0.084)	(0.038)	(0.075)	(0.069)	(0.027)	(0.053)	(0.035)	(0.053)	(0.060)	(0.045)
Female CEO=1	-0.087*	-0.151***	-0.209***	-0.179***	-0.040	-0.182***	-0.007	-0.096**	-0.177***	-0.033
	(0.045)	(0.045)	(0.056)	(0.053)	(0.031)	(0.042)	(0.019)	(0.049)	(0.035)	(0.044)
Size FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	786	468	598	699	263	689	689	259	373	301
Clusters	48	41	45	47	29	46	46	11	33	27
Pbar	0.354	0.350	0.408	0.488	0.0837	0.332	0.0929	0.236	0.265	0.140
Log Likelihood	-488.3	-274.9	-370.7	-453.6	-73.34	-408.5	-201.1	-131.7	-193.8	-117.8

## Appendix F2: Effects of Experiment on Individual Clauses (OLS)

Probit model with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1).

Dependent variable: Auditors rate firm in compliance with clause =1	Fire Prevention	Safety Signs	Lightning Prevention	Washing Facility	Chemical Transport	Fuses/ Sockets	Lighting System	Mixing Equipment	Welding Equipment	Corrosive Chemicals
citude -1	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Information Treatment=1	0.038	-0.113	-0.028	-0.069	-0.010	-0.081	-0.055	0.220	-0.093	0.028
	(0.102)	(0.109)	(0.127)	(0.116)	(0.152)	(0.089)	(0.072)	(0.311)	(0.110)	(0.203)
Participation Treatment=1	0.034	0.095	0.149*	0.109	0.025	-0.017	0.092	-0.153	0.006	0.100
	(0.075)	(0.100)	(0.075)	(0.072)	(0.096)	(0.095)	(0.062)	(0.164)	(0.181)	(0.222)
Hanoi=1	-0.157*	-0.285***	-0.270**	-0.108	-0.126	-0.008	-0.020	-0.133	-0.127	-0.289
	(0.092)	(0.099)	(0.105)	(0.109)	(0.117)	(0.123)	(0.097)	(0.225)	(0.183)	(0.175)
Female CEO=1	0.218***	-0.033	0.073	0.055	0.116	-0.086	-0.066	-0.089	-0.178***	0.161
	(0.072)	(0.078)	(0.066)	(0.054)	(0.108)	(0.083)	(0.040)	(0.088)	(0.062)	(0.132)
Constant	0.089	0.814***	0.773***	0.974***	-0.149	0.914***	0.007	-0.054	-0.112	0.221
	(0.124)	(0.095)	(0.163)	(0.085)	(0.116)	(0.139)	(0.123)	(0.293)	(0.203)	(0.486)
Size FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	195	84	132	148	42	158	158	45	83	32
Clusters	0.096	0.199	0.221	0.098	0.323	0.090	0.050	0.083	0.101	0.138
R-Squared	30	23	26	28	13	30	30	10	22	14
RMSE	0.491	0.419	0.392	0.388	0.346	0.488	0.322	0.514	0.501	0.482

### Appendix F3: Effects of Experiment on Individual Clauses (OLS) in High Access Districts (>80% Access)

Linear probability model (OLS) with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1).

Auditors rate firm in compliance with clause =1	Unadjust	ed p-value	Adjuste	d p-value
Fire Prevention	0.384	FALSE	0.549	FALSE
Safety Signs	0.734	FALSE	0.917	FALSE
Lightning Prevention	0.005	TRUE	0.025	TRUE
Washing Facility	0.002	TRUE	0.02	TRUE
Chemical Transport	0.993	FALSE	0.993	FALSE
Fuses/Sockets	0.958	FALSE	0.993	FALSE
Lighting System	0.018	TRUE	0.06	TRUE
Mixing Equipment	0.078	FALSE	0.156	FALSE
Welding Equipment	0.12	FALSE	0.2	FALSE
Corrosive Chemicals	0.039	TRUE	0.097	TRUE

### Appendix G: Benjamini-Hochberg Multiple Comparisons Correction

To perform the test, we run the standard regressions and order the p-values from smallest to largest. Then we find the largest p-value that satisfies the question  $|p_k| \le \frac{k}{m} \alpha$ , where m is the number of outcomes, k is the index for each p-value, and  $\alpha$  is the level of significance (.05).

#### **Appendix H: Criteria for Regulation Selection**

1. Regulation would be drafted by the government in the near future.

2. Broadly relevant, so that we could concentrate our test geographically but still have sufficient statistical power. Second, we needed it to be sufficiently salient and costly for affected firms, such that firms would be motivated to participate.

3. Compliance requirements that would be as easily observable as possible. This final factor was critical to our desire to avoid social desirability bias and the resulting overestimation of compliance behavior that has limited the validity of previous work relying on self-assessments.

4. For practical considerations, we decided to focus on a technical regulation (*dự thảo*) drafted by a ministry rather than a law drafted by the Vietnam National Assembly. Laws tend to be quite expansive and more ambiguous, with the details of compliance usually filled in later by implementing documents. This includes technical regulations, which therefore offered a cleaner test. Moreover, unlike laws, technical regulations are posted with greater regularity, increasing our options for finding a good fit and allowing more time for preparation and training.

Appendix I: Information and Sensitivity Tests Related to <u>Table 2</u> in Manuscript

Dependent variable: "Government officials	All Firms From Round 1 and Round 3							
have sufficient understanding of business like this one to effectively carry out their regulatory duties" (1 Strongly Disagree to	No Controls	Blocking Variables	Sector FE	Audited Firms	Treatment 1	Audited Firms		
4 Strongly Agree)	(1)	(2)	(3)	(4)	(5)	(6)		
Endline=1	0.229***	0.247***	0.244***	0.231***	0.244***	0.236***		
	(0.040)	(0.038)	(0.036)	(0.050)	(0.042)	(0.052)		
Participation Treatment=1	-0.040	-0.041	-0.039	-0.019	-0.083	-0.049		
	(0.036)	(0.036)	(0.037)	(0.043)	(0.054)	(0.065)		
Endline*Participation	0.103*	0.103*	0.104*	0.106**	0.104*	0.113*		
	(0.053)	(0.054)	(0.053)	(0.050)	(0.055)	(0.060)		
Hanoi=1		-0.018	-0.024	0.105**	-0.027	0.103**		
		(0.052)	(0.048)	(0.043)	(0.048)	(0.043)		
Female CEO=1		-0.130***	-0.125***	-0.167***	-0.123***	-0.166***		
		(0.028)	(0.020)	(0.033)	(0.021)	(0.032)		
Information Treatment=1					0.078	0.051		
					(0.052)	(0.064)		
Endline*Information					-0.000	-0.012		
					(0.042)	(0.058)		
Contant	2.519***	2.564***	2.596***	2.616***	2.563***	2.595***		
	(0.021)	(0.020)	(0.045)	(0.069)	(0.048)	(0.065)		
Size FE	No	Yes	Yes	Yes	Yes	Yes		
Sector FE	No	No	Yes	Yes	Yes	Yes		
Observations	1,888	1,888	1,888	950	1,888	950		
Clusters	53	53	53	44	53	44		
R-Squared	0.045	0.055	0.060	0.085	0.062	0.086		
RMSE	0.631	0.629	0.629	0.618	0.628	0.619		

## **Appendix I1: Replication of Table 2 Using Ordinary Least Squares**

OLS with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). Equation 1 is unadjusted, Equation 2 controls only for blocking variables, Equation 3 introduces ISIC two-digit sector fixed effects, and Equation 4 removes all firms that did not grant access to factory floor. Equations 5 and 6 control for firms receiving Treatment 1.

Dependent variable: "Government officials	<u>0</u>	<u>LS</u>	<u>OPR</u>	<u>OPROBIT</u>		
have sufficient understanding of business like this one to effectively carry out their regulatory duties" (1 Strongly Disagree to	Sector FE	Audited Firms	Sector FE	Audited Firms		
4 Strongly Agree)	(1)	(2)	(3)	(4)		
Endline=1	0.244***	0.236***	0.443***	0.447***		
	(0.042)	(0.052)	(0.086)	(0.107)		
T2=1	-0.005	0.002	-0.007	0.008		
	(0.039)	(0.044)	(0.070)	(0.079)		
Endline*T2	0.104*	0.101*	0.194*	0.191*		
	(0.059)	(0.056)	(0.102)	(0.101)		
Female CEO=1	-0.027	0.103**	-0.044	0.196**		
	(0.048)	(0.043)	(0.087)	(0.083)		
Hanoi==1	-0.123***	-0.166***	-0.220***	-0.306***		
	(0.021)	(0.032)	(0.040)	(0.055)		
T1=1	0.078	0.051	0.138	0.090		
	(0.052)	(0.064)	(0.092)	(0.111)		
Endline*T1	-0.000	-0.012	0.005	-0.022		
	(0.042)	(0.058)	(0.076)	(0.110)		
Cut Point 1	2.520***	2.550***	-1.694***	-1.753***		
	(0.045)	(0.079)	(0.078)	(0.138)		
Cut Point 2			-0.063	-0.141		
			(0.086)	(0.146)		
Cut Point 3			1.856***	1.849***		
			(0.096)	(0.187)		
Size FE	Yes	Yes	Yes	Yes		
Sector FE	Yes	Yes	Yes	Yes		
Observations	1,888	950	1,888	950		
Clusters	53	44	53	44		
Pseudo R-Squared	0.062	0.086	0.0331	0.0471		
RMSE	0.628	0.619				
Log Likelihood	-1792	-882.3	-1785	-877.3		

### Appendix I2: Replication of Table 2 with Original Treatment Conditions

Standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). Equations 1 and 2 use OLS, while Equations 3 and 4 use OPROBIT. Equations 1 and 3 are the fully specified model from Table 2. Equations 2 and 4 use Auditor FE.

Dependent variable: How do you rate the	No Controls	Blocking Variables	Sector FE	Auditor FE
quality of this draft regulation relative to the other regulations that you have opportunities to read or give comments on? (5. Much higher; 1. Much Lower).	(1)	(2)	(3)	(4)
Information Treatment=1	0.481***	0.496***	0.498***	0.492***
	(0.104)	(0.102)	(0.100)	(0.087)
Participation Treatment=1	0.291***	0.280***	0.279***	0.265***
-	(0.097)	(0.096)	(0.097)	(0.097)
Hanoi=1		0.165**	0.158*	0.178***
		(0.079)	(0.080)	(0.050)
Female CEO=1		0.018	0.015	0.024
		(0.087)	(0.089)	(0.090)
Constant	1.211***	1.044***	0.990***	0.743***
	(0.046)	(0.083)	(0.088)	(0.153)
Size FE	No	Yes	Yes	Yes
Sector FE	No	No	Yes	Yes
Auditor FE	No	No	No	Yes
Observations	830	830	830	830
Clusters	48	48	48	48
R-Squared	0.072	0.087	0.092	0.132
RMSE	1.195	1.190	1.192	1.173

## Appendix I3: Regulatory Quality as Alternative Measure of Legitimacy

Linear probability model (OLS) with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). Equation 1 is unadjusted, Equations 2 controls only for blocking variables, Equation 3 introduces ISIC two-digit sector fixed effects, and Equation 4 introduces auditor fixed effects.

Dependent variable: "Government officials	All Firms From Round 1 and Round 3								
have sufficient understanding of business like this one to effectively carry out their regulatory duties " (1 Strongly Disagree to	No Controls	Blocking Variables	Sector FE	Audited Firms	Treatment 1	Audited Firms			
4 Strongly Agree)	(1)	(2)	(3)	(4)	(5)	(6)			
Endline=1	0.416***	0.447***	0.443***	0.442***	0.441***	0.449***			
	(0.081)	(0.080)	(0.077)	(0.102)	(0.087)	(0.107)			
Participation Treatment=1	0.058	0.046	0.053	0.140**	-0.027	0.089			
	(0.058)	(0.056)	(0.058)	(0.067)	(0.072)	(0.090)			
Endline*Participation	0.144*	0.138*	0.136*	0.098	0.132	0.109			
	(0.079)	(0.080)	(0.078)	(0.082)	(0.083)	(0.104)			
Female CEO=1		-0.022	-0.040	0.158*	-0.046	0.154*			
		(0.097)	(0.089)	(0.092)	(0.089)	(0.094)			
Hanoi==1		-0.201***	-0.185***	-0.219***	-0.182***	-0.216***			
		(0.058)	(0.039)	(0.053)	(0.040)	(0.052)			
Information Treatment=1					0.140	0.086			
					(0.093)	(0.113)			
Endline*Information					0.005	-0.018			
					(0.076)	(0.110)			
Cut Point 1	-1.670***	-1.745***	-1.744***	-1.665***	-1.669***	-1.622***			
	(0.052)	(0.061)	(0.082)	(0.144)	(0.089)	(0.145)			
Cut Point 2	-0.083*	-0.152***	-0.145**	-0.101	-0.067	-0.058			
	(0.043)	(0.037)	(0.072)	(0.143)	(0.087)	(0.144)			
Cut Point 3	1.851***	1.791***	1.807***	1.925***	1.888***	1.970***			
	(0.060)	(0.067)	(0.100)	(0.185)	(0.101)	(0.182)			
Size FE	No	Yes	Yes	Yes	Yes	Yes			
Sector FE	No	No	Yes	Yes	Yes	Yes			
Observations	1,645	1,645	1,645	834	1,645	834			
Clusters	52	52	52	43	52	43			
Pseudo R-Squared	0.0223	0.0260	0.0298	0.0410	0.0311	0.0413			
Log Likelihood	-1593	-1593	-1593	-796.5	-1593	-796.5			

## **Appendix I4: Replication of Table 2 (Legitimacy) Dropping Commenters**

Ordered probit with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). Equation 1 is unadjusted, Equation 2 controls only for blocking variables, Equation 3 introduces ISIC two-digit sector fixed effects, and Equation 4 removes all firms that did not grant access to factory floor. Equations 5 and 6 control for firms receiving Treatment 1.

Appendix J: Information and Sensitivity Tests Related to <u>Table 3</u> in Manuscript

	<u>DV:</u> A	Allowed Au	<u>dit of Facto</u>	<u>ry=1</u>	DV: Agre	eed to Inte	<u>rview=1</u>
Dependent variable	No Controls	Blocking Variables	Sector FE	Auditor FE	No Controls	Blocking Variables	Sector FE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Information Treatment=1	-0.020	-0.023	-0.018	-0.027	0.012	0.022	0.024
	(0.036)	(0.037)	(0.035)	(0.030)	(0.030)	(0.037)	(0.033)
Participation Treatment=1	0.081**	0.079***	0.081***	0.081**	0.001	0.005	0.007
	(0.031)	(0.029)	(0.028)	(0.030)	(0.030)	(0.031)	(0.028)
Hanoi=1		-0.251***	-0.210***	-0.039		0.455***	0.489***
		(0.037)	(0.040)	(0.029)		(0.094)	(0.084)
Female CEO=1		-0.139***	-0.142***	-0.113**		-0.027	-0.029
		(0.049)	(0.047)	(0.055)		(0.028)	(0.028)
Constant	0.600***	0.707***	0.563***	0.903***	0.683***	0.542***	0.305***
	(0.049)	(0.051)	(0.052)	(0.069)	(0.021)	(0.097)	(0.063)
Size FE	No	Yes	Yes	Yes	No	Yes	Yes
Sector FE	No	No	Yes	Yes	No	No	Yes
Auditor FE	No	No	No	Yes	No	No	No
Observations	830	830	830	830	1,200	1,200	1,200
Clusters	48	48	48	48	53	53	53
R-Squared	0.005	0.089	0.119	0.371	0.000	0.211	0.232
RMSE	0.485	0.466	0.460	0.391	0.462	0.412	0.407

## **Appendix J1: Replication of Table 4 Using Ordinary Least Squares**

Linear probability model (OLS) with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). Panel 1 studies whether auditors were able to visit factor after conducting endline interview. Panel 2 studies normal attrition in the panel. Equations 1 & 5 are unadjusted, Equations 2 & 6 control only for blocking variables, Equations 3 & 7 introduce ISIC two-digit sector fixed effects, and Equation 4 introduces auditor fixed effects.

	<u>DV:</u> A	Allowed Au	dit of Facto	ory=1	<u>DV: Agre</u>	eed to Inte	rview=1
Dependent variable	No Controls	Blocking Variables	Sector FE	Auditor FE	No Controls	Blocking Variables	Sector FE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Information Treatment=1	-0.039	-0.038	-0.035	-0.041	0.000	0.011	0.010
	(0.034)	(0.038)	(0.037)	(0.034)	(0.033)	(0.059)	(0.056)
Participation Treatment=1	0.077**	0.082**	0.090***	0.103***	0.005	0.010	0.019
	(0.030)	(0.032)	(0.033)	(0.032)	(0.033)	(0.046)	(0.046)
Hanoi=1		-0.248***	-0.209***	-0.033			
		(0.039)	(0.041)	(0.029)			
Female CEO=1		-0.161***	-0.170***	-0.172**		-0.061	-0.050
		(0.057)	(0.056)	(0.071)		(0.047)	(0.051)
Baseline Legitimacy	0.016	-0.005	-0.010	-0.022	0.017	0.062*	0.062*
	(0.024)	(0.024)	(0.024)	(0.028)	(0.019)	(0.035)	(0.035)
Baseline Probability	0.621	0.621	0.621	0.735	0.692	0.546	0.546
Size FE	No	Yes	Yes	Yes	No	Yes	Yes
Sector FE	No	No	Yes	Yes	No	No	Yes
Auditor FE	No	No	No	Yes	No	No	No
Observations	780	780	780	657	1,127	764	764
Clusters	48	48	48	48	53	52	52
Pseudo R-Squared	0.00328	0.0660	0.0935	0.0999	0.000421	0.00901	0.0546
Log Likelihood	-516.1	-483.6	-469.4	-341.8	-695.5	-521.6	-497.6

## Appendix J2 : Replication of Table 4 Controlling for Baseline Legitimacy

Probit model with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). Marginal probabilities instead of coefficients presented. Panel 1 studies whether auditors were able to visit factory after conducting endline interview. Panel 2 studies normal attrition in the panel. Equations 1 & 5 are unadjusted, Equations 2 & 6 control only for blocking variables, Equations 3 & 7 introduce ISIC two-digit sector fixed effects, and Equation 4 introduces auditor fixed effects.

	<u>DV:</u> A	Allowed Au	DV: Agre	eed to Inte	rview=1		
	No	Blocking	Sector FE	Auditor	No	Blocking	Sector FE
Dependent variable	Controls	Variables		FE	Controls	Variables	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
T1=1	-0.019	-0.022	-0.018	-0.023	0.012	0.022	0.024
	(0.035)	(0.039)	(0.038)	(0.035)	(0.030)	(0.037)	(0.033)
T2=1	0.061**	0.064*	0.076**	0.078**	0.013	0.027	0.031
	(0.028)	(0.035)	(0.034)	(0.038)	(0.029)	(0.027)	(0.026)
Hanoi=1		-0.255***	-0.218***	-0.050*		0.455***	0.489***
		(0.038)	(0.041)	(0.027)		(0.094)	(0.084)
Female CEO=1		-0.148***	-0.155***	-0.151**		-0.027	-0.029
		(0.056)	(0.055)	(0.065)		(0.028)	(0.028)
Baseline Probability	0.622	0.622	0.622	0.736	0.683	0.542	0.305
Size FE	No	Yes	Yes	Yes	No	Yes	Yes
Sector FE	No	No	Yes	Yes	No	No	Yes
Auditor FE	No	No	No	Yes	No	No	No
Observations	830	830	830	700	1,200	1,200	1,200
Clusters	48	48	48	48	53	53	53
Pseudo R-Squared	0.00400	0.0684	0.0944	0.0970	0.000	0.211	0.232
Log Likelihood	-548.3	-512.8	-498.5	-365.0	-775.5	-633.7	-616.9

## **Appendix J3: Replication of Table 4 using Original Treatment Conditions**

Probit model with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). Marginal probabilities instead of coefficients presented. Panel 1 studies whether auditors were able to visit factory after conducting endline interview. Panel 2 studies normal attrition in the panel. Equations 1 & 5 are unadjusted, Equations 2 & 6 control only for blocking variables, Equations 3 & 7 introduce ISIC two-digit sector fixed effects, and Equation 4 introduces auditor fixed effects. Appendix K: Information and Sensitivity Tests Related to <u>Table 4</u> in Manuscript

		<u>All F</u>	<u>'irms</u>	
Dependent variable: Clauses with which firm is judged to be in compliance (% of	No Controls	Blocking Variables	Sector FE	Auditor FE
total)	(1)	(2)	(3)	(4)
Information Treatment=1	-0.023	-0.023	-0.024	-0.028
	(0.026)	(0.025)	(0.023)	(0.027)
Participation Treatment=1	0.045**	0.046**	0.051**	0.046**
	(0.022)	(0.022)	(0.021)	(0.022)
Hanoi=1		-0.125***	-0.102***	-0.009
		(0.026)	(0.032)	(0.026)
Female CEO=1		-0.091*	-0.091*	-0.069
		(0.049)	(0.048)	(0.053)
Baseline Legitimacy	0.025	0.017	0.015	0.007
	(0.021)	(0.021)	(0.021)	(0.022)
Constant	0.307***	0.361***	0.328***	0.554***
	(0.059)	(0.069)	(0.069)	(0.063)
Size FE	Yes	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes	Yes
Auditor FE	No	Yes	No	Yes
Observations	765	765	765	765
Clusters	48	48	48	48
R-Squared	0.004	0.057	0.080	0.249
RMSE	0.377	0.368	0.365	0.332

#### Appendix K1: Replication of Table 5 Controlling for Baseline Legitimacy

OLS with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). The first panel analyzes all firms where auditors were given access. The second panel drops firms in the participation treatment that provided comments. Equation 1 is unadjusted, Equation 2 controls only for blocking variables, Equation 3 introduce ISIC two-digit sector fixed effects, and Equation 4 introduces auditor fixed effects.

		<u>All F</u>	<u>irms</u>	
Dependent variable: Clauses with which firm is judged to be in compliance (% of	No Controls	Blocking Variables	Sector FE	Auditor FE
_total)	(1)	(2)	(3)	(4)
T1=1	-0.017	-0.016	-0.017	-0.020
	(0.024)	(0.024)	(0.022)	(0.024)
T2=1	0.035*	0.033	0.038**	0.027
	(0.018)	(0.020)	(0.018)	(0.023)
Hanoi=1		-0.137***	-0.113***	-0.025
		(0.024)	(0.031)	(0.023)
Female CEO=1		-0.085*	-0.084*	-0.059
		(0.044)	(0.044)	(0.046)
Constant	0.364***	0.398***	0.354***	0.554***
	(0.035)	(0.050)	(0.046)	(0.044)
Size FE	Yes	Yes	Yes	Yes
Sector FE	Yes	Yes	Yes	Yes
Auditor FE	No	Yes	No	Yes
Observations	813	813	813	813
Clusters	48	48	48	48
R-Squared	0.003	0.062	0.086	0.255
RMSE	0.376	0.367	0.363	0.330

Appendix K2: Replication of Table 5 using Original Treatment Conditions

OLS with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). The first panel analyzes all firms where auditors were given access. The second panel drops firms in the participation treatment that provided comments. Equation 1 is unadjusted, Equation 2 controls only for blocking variables, Equation 3 introduce ISIC two-digit sector fixed effects, and Equation 4 introduces auditor fixed effects.

Dependent variable: <u>Access to Factory Floo</u>		tory Floor=1	Compliance with	iance with Regulation (%)	
Specifications	No Controls	Blocking Variables	No Controls	Blocking Variables	
	(1)	(2)	(3)	(4)	
Information Treatment=1	-0.004	-0.001	-0.006	-0.008	
	(0.039)	(0.038)	(0.031)	(0.029)	
Participation Treatment=1	0.076**	0.082**	0.048*	0.054**	
	(0.032)	(0.034)	(0.026)	(0.026)	
Hanoi=1	-0.014	0.009	0.013	0.022	
	(0.035)	(0.039)	(0.029)	(0.032)	
Female CEO=1	-0.142**	-0.145**	-0.088	-0.085	
	(0.067)	(0.066)	(0.058)	(0.056)	
Baseline Probability/Constant	0.736	0.736	0.414***	0.492***	
			(0.055)	(0.051)	
Size FE	No	Yes	No	Yes	
Sector FE	No	Yes	No	Yes	
Observations	701	701	684	684	
Clusters	48	48	48	48	
Pseudo & R-Squared	0.0209	0.0548	0.030	0.058	
Log Likelihood	-396.1	-382.4	-279.8	-269.6	
RMSE			0.367	0.363	

#### Appendix L: Tables 4 and 5 Dropping Auditors with Problems Obtaining Factory Access

This table tests whether results remain robust after dropping two problemmatic auditors, who had difficulty obtaining factory access. Standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). Analysis drops auditors that had difficulty accessing factories. The first panel analyzes access to factory floor using a probit specification. The second panel studies compliance with regulation using OLS.

Denen dent verrichte.	Access to Eastory Floor-1				<u>Compliance with Regulation (%)</u>				
Dependent Variable:	<u> </u>	Access to Fac	tory Floor=1	<u>L</u>	No Ac	cess=0	High Acce	High Access Districts	
Specifications	No Controls	Blocking Variables	Sector FE	Auditor FE	Sector FE	Auditor FE	Sector FE	Auditor FE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Received Response Report=1	-0.045	-0.043	-0.048	-0.058	0.009	0.005	0.006	0.020	
	(0.064)	(0.062)	(0.057)	(0.054)	(0.037)	(0.034)	(0.082)	(0.087)	
Hanoi=1		-0.250***	-0.195***	0.001	-0.097*	0.022	0.184**	0.195*	
		(0.050)	(0.068)	(0.074)	(0.051)	(0.052)	(0.080)	(0.097)	
Female CEO=1		-0.118	-0.107	-0.180*	0.004	-0.040	-0.180	-0.145	
		(0.127)	(0.123)	(0.096)	(0.093)	(0.072)	(0.128)	(0.119)	
Constant	0.602***	0.730***	0.489***	0.828***	0.264***	0.450***	0.358	0.330	
	(0.051)	(0.102)	(0.090)	(0.111)	(0.093)	(0.097)	(0.241)	(0.233)	
Size FE	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Sector FE	No	No	Yes	Yes	Yes	Yes	Yes	Yes	
Auditor FE	No	No	No	Yes	No	Yes	No	No	
Observations	205	205	205	205	200	200	61	61	
Clusters	33	33	33	33	33	33	25	25	
Mean in Control Group	0.585	0.585	0.585	0.585	0.347	0.347	0.52	0.52	
R-Squared	0.002	0.099	0.147	0.416	0.101	0.281	0.276	0.329	
RMSE	0.495	0.479	0.473	0.402	0.360	0.331	0.300	0.312	

#### **Appendix M: Differentiating Legitimacy from Learning** (Effect of Response Report on Information Group)

OLS with standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). Analysis restricted to only firms that received government response report. The first panel analyzes all firms where auditors were given access. The second panel drops firms in the participation treatment that provided comments. Equation 1 is unadjusted, Equation 2 controls only for blocking variables, Equation 3 introduce ISIC two-digit sector fixed effects, and Equation 4 introduces auditor fixed effects. Estimating equations 7 and 8 restrict the analysis to districts where auditors were able to access over 80% of factories in the jurisdiction.

#### **Appendix N: Heterogeneous Treatment Effects**

As discussed on pages 8-9 of our hypotheses development in Section I, theory underlying the legitimacy mechanism predicts that the regulatory compliance effects of participation should be strongest among SMEs. We test for this relationship in Table 7 by interacting our treatment variables with a trichotomous measure of size: 1) Micro enterprise with less 10 employees; 2) SMEs with between 10 and 200 employees and 3) Large enterprises with over 200 employees.

The first significant difference we observe is in the Control. In Columns 1 and 3, we see that large firms in the Control were 42.1% more likely to provide factory access and demonstrated 52.1 percentage points greater compliance than micro enterprises and SMEs. This makes sense, since large firms are far more visible and are more likely to be inspected than their smaller peers.

Looking at the interactions, we see that large firms were less influenced by the participation treatment than SMEs in all four specifications. The interactions between the large firm dummy variable and the participation treatment are significant, negative, and sizable. To clearly illustrate this, we calculate the marginal effect of the participation treatment for all three size-categories, using the coefficients and standard errors from Columns 1 and 3 in Table 5. In total, Figure 4 demonstrates that participation was associated with 11.9% greater factory access and 8.0 percentage points greater compliance in the SME category. But positive effects are not observed within any other size category. In fact, participation is associated with negative compliance among the largest firms.

	<u>All Firms</u>						
Dependent variable:	Access to l	Factory=1	Complia	nce Index			
	(1)	(2)	(3)	(4)			
Size Category 2 (SME)	0.000	-0.007	0.014	0.000			
	(0.043)	(0.043)	(0.037)	(0.038)			
Size Category 3 (Large)	0.421***	0.274***	0.521***	0.466***			
	(0.073)	(0.057)	(0.028)	(0.042)			
Information Treatment=1	0.022	0.032	0.009	0.015			
	(0.058)	(0.043)	(0.055)	(0.044)			
SME*Information	-0.048	-0.085	-0.030	-0.043			
	(0.088)	(0.076)	(0.093)	(0.083)			
Large*Information	0.014	-0.040	0.076	-0.036			
-	(0.134)	(0.064)	(0.153)	(0.090)			
Participation Treatment=1	0.026	0.012	0.024	0.004			
-	(0.055)	(0.053)	(0.052)	(0.053)			
SME*Participation	0.093	0.113	0.054	0.068			
	(0.092)	(0.094)	(0.081)	(0.082)			
Large*Participation	-0.480**	-0.210	-0.536***	-0.332***			
	(0.217)	(0.137)	(0.174)	(0.122)			
Hanoi=1	-0.215***	-0.045	-0.118***	-0.029			
	(0.040)	(0.028)	(0.031)	(0.022)			
Female CEO=1	-0.144***	-0.111*	-0.088**	-0.061			
	(0.048)	(0.057)	(0.043)	(0.046)			
Constant	0.710***	0.905***	0.410***	0.517***			
	(0.037)	(0.038)	(0.032)	(0.036)			
Size FE	Yes	Yes	Yes	Yes			
Sector FE	Yes	Yes	Yes	Yes			
Auditor FE	No	Yes	No	Yes			
Observations	824	824	807	807			
Clusters	48	48	48	48			
R-Squared	0.124	0.372	0.086	0.256			
RMSE	0.458	0.391	0.363	0.330			

## Appendix N1: Conditional Effect of Firm Size on Regulatory Compliance

OLS with marginal probabilities in parentheses. Standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1).





Dependent variable:	Access to Factory Floor-1				<u>Compliance with Regulation (%)</u>	
	<u>ALLESS to Factory Floor - 1</u>				No Access=0	
Specifications	No Controls	<b>Blocking Variables</b>	Sector FE	Auditor FE	Sector FE	Auditor FE
	(1)	(2)	(3)	(4)	(5)	(6)
Information Treatment=1	-0.019	-0.022	-0.017	-0.022	-0.017	-0.020
	(0.034)	(0.039)	(0.037)	(0.034)	(0.022)	(0.024)
Participation Treatment=1	0.114***	0.105***	0.113***	0.122***	0.063**	0.059*
	(0.034)	(0.034)	(0.034)	(0.033)	(0.027)	(0.030)
Commenting Firms=1	-0.120**	-0.065	-0.067	-0.091**	-0.026	-0.042
	(0.048)	(0.045)	(0.042)	(0.044)	(0.042)	(0.042)
Hanoi=1		-0.249***	-0.210***	-0.045	-0.110***	-0.022
		(0.038)	(0.043)	(0.028)	(0.034)	(0.024)
Female CEO=1		-0.153***	-0.161***	-0.157**	-0.086*	-0.063
		(0.056)	(0.056)	(0.064)	(0.045)	(0.047)
Mean in Control Group/Constant	0.622	0.622	0.622	0.736	0.354***	0.556***
					(0.046)	(0.043)
Size FE	No	Yes	Yes	Yes	Yes	Yes
Sector FE	No	No	Yes	Yes	Yes	Yes
Auditor FE	No	No	No	Yes	No	Yes
Observations	830	830	830	700	813	813
Clusters	48	48	48	48	48	48
Pseudo R <sup>2</sup> /R2	0.00787	0.0694	0.0955	0.0994	0.086	0.256
Log Likelihood	-546.2	-512.3	-497.9	-364.1	-322.3	-238.9
RMSE					0.364	0.330

Appendix O: Alternative: Differentiating Legitimacy from Substantive Change (Controlling for Commenting Firms)
--

Standard errors, clustered by Province-Sector, in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1). Analysis uses Coarsened Exact Matching (CEM) to identify noncommenters in Control and T1 groups. All commenters and potential non-commenters are dropped from this analysis. The first panel analyzes all firms where auditors were given access using a probit specification. The second panel drops firms in the participation treatment that provided comments using an OLS specification. Equation 1 is unadjusted, Equation 2 controls only for blocking variables, Equations 3 and 5 introduce ISIC two-digit sector fixed effects, and Equations 4 and 6 introduces auditor fixed effects. Sample size drops in Model 4 because of the correlation because of two Hanoi auditors had difficulty accessing factories.