

## Appendix A. Sample Posted B Grade



## Appendix B. Regression Results, Impact on Final Inspection Scores

### Pre-Post Estimation

VARIABLES	(1)	(2)	(3)	(4)	(5)
Post	-7.62*** (0.08)	-5.08*** (0.16)	-4.25*** (0.18)	-4.05*** (0.18)	-4.94*** (0.29)
Post*Linear Trend	—	—	—	-0.29*** (0.03)	-1.10*** (0.12)
Post*Linear Trend <sup>2</sup>					-.07*** (0.01)
Linear Trend	—	-0.20*** (0.01)	-0.18*** (0.02)	-0.05* (0.03)	.68*** (0.09)
Linear Trend <sup>2</sup>					.08*** (0.01)
Seasonal FE	N	Y	Y	Y	Y
Rest. Char.	N	Y	N	N	N
Restaurant FE	N	N	Y	Y	Y
Constant	24.55*** (0.07)	13.27*** (2.33)	22.57*** (0.12)	23.12*** (0.14)	24.18*** (0.19)
Inspections	167,045	167,045	125,036	125,036	125,036
Restaurants	40,554	40,554	20,634	20,634	20,633
R-squared	0.06	0.11	0.31	0.31	0.31

Notes: Robust standard errors clustered by restaurant in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

# Rollout Estimation

	<b>Final Inspection Score</b>	
<b>VARIABLES</b>	<b>(3)</b>	<b>(4)</b>
Graded Inspection	-3.382*** (0.181)	-3.778*** (0.160)
Quarter Of Grading Policy		
2	1.217*** (0.071)	1.573*** (0.070)
3	0.574*** (0.123)	1.233*** (0.093)
4	0.756*** (0.150)	2.051*** (0.113)
Restaurant FE	N	Y
Constant	20.219*** (0.099)	19.791*** (0.066)
Observations	93,788	93,788
R-squared	0.011	0.763

Notes: Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Appendix C. NAICS Codes for Establishment Groupings

<b>"Graded" NYC Restaurants</b>		<b>Ungraded Suburban Restaurants</b>		<b>Ungraded Food and Entertainment Establishments</b>	
<b>NAICS</b>	<b>Business/Service</b>	<b>NAICS</b>	<b>Business/Service</b>	<b>NAICS</b>	<b>Business/Service</b>
722---	Food Services and Drinking Places	722---	Food Services and Drinking Places	4451--*	Grocery Stores
445299	All Other Specialty Food Stores	445299	All Other Specialty Food Stores	4452--*	Specialty Food Stores
445291	Baked Goods Stores	445291	Baked Goods Stores	4453--	Beer, Wine, and Liquor Stores
445120	Convenience Stores	445120	Convenience Stores	7139--	Other Amusement and Recreation Industries
				712---	Museums, Historical Sites, and Similar Institutions
				711--	Performing Arts, Spectator Sports, and Related Industries

\*These exclude the NAICS codes included in the restaurant groups, i.e. 445299, 445291, 445120.

Appendix D. Mean Treatment and Control Group Characteristics, Rollout Sample By Quarter

	Jun – Aug, 2010		Sept – Nov, 2010		Dec – Feb, 2011		Mar – May, 2011	
	Treatment	Control	Treatment	Control	Treatment	Control	Treatment	Control
<u>Characteristics:</u>								
Borough								
Manhattan	39.6%	41.4%	40.3%	41.8%	41.5%	40.8%	41.6%	40.6%
Bronx	9.4	9.8	10.2	9.4	10.0	9.0	9.6	9.3
Brooklyn	24.8	22.8	23.2	22.6	22.9	22.6	22.9	22.0
Queens	25.4	21.8	23.2	21.8	22.2	22.7	22.2	23.5
Staten Island	0.9	4.2	3.1	4.4	3.4	4.9	3.7	4.5
Chain	15.6%	12.3%	13.6%	12.1%	13.8%	9.9%	13.5%	7.8%
Workers	5.9	7.3	6.8	7.5	7.0	7.5	7.2	6.6
<u>Building:</u>								
Assessed Value	7,322,578	9,503,942	9,108,455	9,557,440	9,151,351	9,293,507	9,061,502	10,200,000

Building Type								
Office/Commercial	9.2%	7.2%	8.0%	6.9%	8.0%	5.6%	7.6%	4.7%
Retail/Commercial	34.7	34.7	35.5	34.1	34.4	34.8	34.5	34.0
Mixed Retail	41.0	43.3	42.7	43.5	43.8	42.8	43.7	41.8
Other Commercial	4.5	4.5	4.0	4.8	4.1	5.4	4.3	6.4
Residential	9.0	8.2	7.9	8.4	8.3	8.2	8.2	8.7
Government/Public	1.6	2.2	1.9	2.4	1.5	3.4	1.7	4.4
Joint Significance	F( 12, 937) = 0.80 Prob > F = 0.6523		F( 12, 937) = 1.08 Prob > F = 0.3779		F( 12, 937) = 0.71 Prob > F = 0.7279		F( 11, 937) = 1.39 Prob > F = 0.1738	
Initial Insp. Score	23.5	24.3	26.0	22.9	25.0	21.8	24.1	22.6
Final Insp. Score	18.0	20.1	20.9	19.2	20.5	18.3	19.9	18.8
Fines per Quarter	\$341	\$250	\$329	\$202	\$285	\$175	\$262	\$170
N	1,560	17,326	7,597	11,118	13,098	5,755	16,514	2,717
N with Building Code	1,082	12,122	5,364	7,817	9,333	4,000	11,742	1,858

Notes: Restaurants in the treatment group have their first graded inspection by the end of the fiscal quarter. Control group restaurants do not have a graded

inspection until after the quarter ends. Each observation is a restaurant-quarter.

Appendix E. Regression Results, Impact on Inspection Scores and Fines by Quarter, Rollout Sample

VARIABLES	Initial Inspection	Final Inspection	Fines
Graded Inspection			
In Quarter 1:	1.897*** (0.677)	-2.137*** (0.379)	153.759*** (21.950)
In Quarter 2:	0.810*** (0.180)	-2.377*** (0.177)	26.014 (17.981)
In Quarter 3:	-0.693*** (0.170)	-3.616*** (0.173)	-147.830*** (20.183)
In Quarter 4:	-2.071*** (0.182)	-5.561*** (0.216)	-275.079*** (18.357)
Quarter Of Grading Policy			
2	0.074 (0.052)	1.243*** (0.072)	130.444*** (10.915)
3	-0.133** (0.063)	1.179*** (0.094)	251.674*** (19.331)
4	0.974*** (0.076)	3.409*** (0.151)	387.343*** (17.798)
Restaurant FE	Y	Y	Y
Constant	25.483*** (0.059)	19.736*** (0.067)	326.148*** (6.021)
Observations	122,886	93,451	94,752
R-squared	0.849	0.764	0.553



Notes: Robust standard errors clustered by restaurant in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Impact estimates of graded inspections on initial inspection scores, final inspection scores, and fines by quarter. Graded Inspection captures if the most recent inspection occurs after the restaurant grade program begins in July 2010. Quarters Post \* Graded is an interaction of the number of quarters after the grading policy is implemented and share of a quarter a restaurant has been treated. In Quarter 1, 2, 3, 4 are a vector of interactions between the quarter of observation and share of quarter with a graded inspection. Sample includes all restaurants continuously operating from the quarter before grading to five quarters following grading.

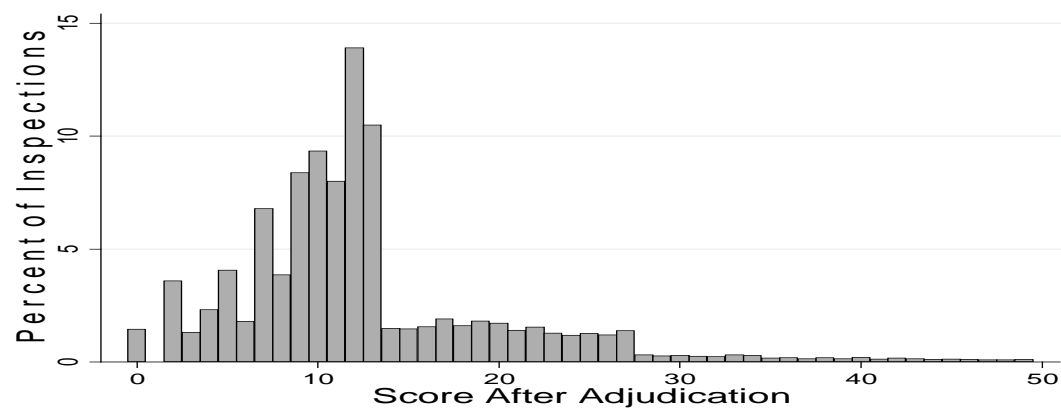
# Appendix F. Inspection Scores and Count of Inspections by Treatment Period, Pre-Post Sample

		Inspections: All Operating Restaurants	Inspections: Continuously Operating Restaurants
Pre		25.07 (76,231)	23.50 (29,804)
Quarters Post			
1-5	Initial	25.31 (41,933)	24.26 (17,723)
	Final Inspection Score	21.87 (27,874)	20.88 (11,743)
6-10	Initial	22.46 (46,180)	21.62 (18,409)
	Final Inspection Score	19.52 (29,135)	18.78 (11,544)

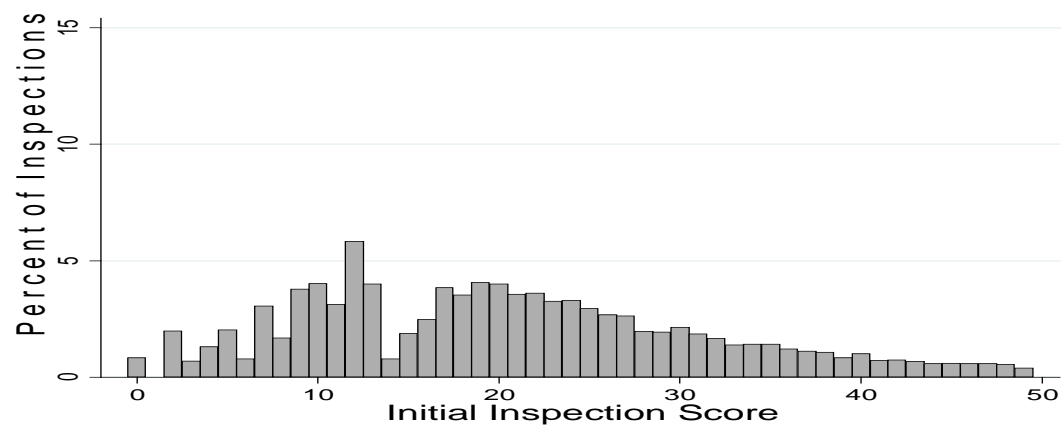
Includes pre-adjudicated inspection scores. Mean score shown on top; number of inspections shown parenthetically. Final Inspection Score is the mean restaurant inspection score for final inspections each cycle (all A-graded initial inspections and re-inspections of restaurants that do not get an A grade on initial inspection). Continuously Operating Restaurants are open for every quarter of the sample period.

## Appendix G: Distribution of inspection scores

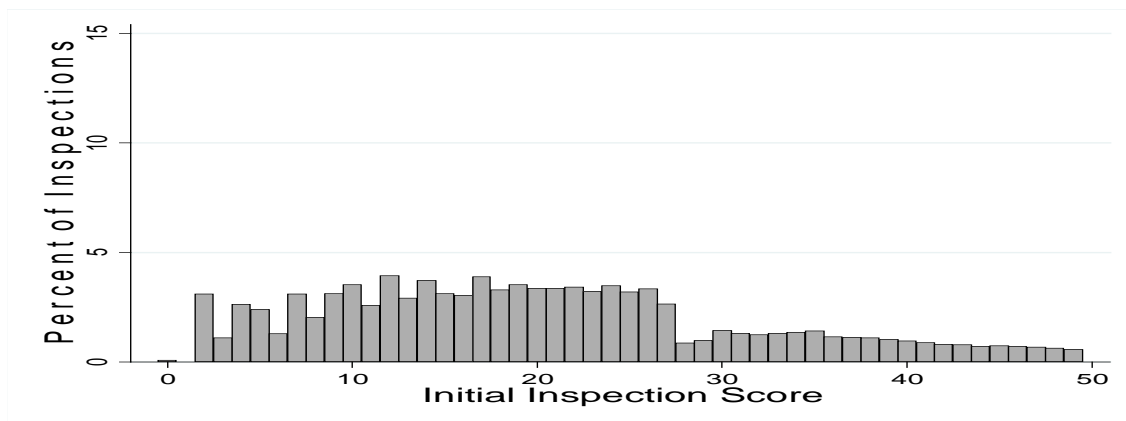
*Panel A. Final Score Distribution, Second Year of Grading*



*Panel B. Initial Inspection Score Distribution, Second Year of Grading*



*Panel C. Initial Inspection Score Distribution, Two Years Before Grading*

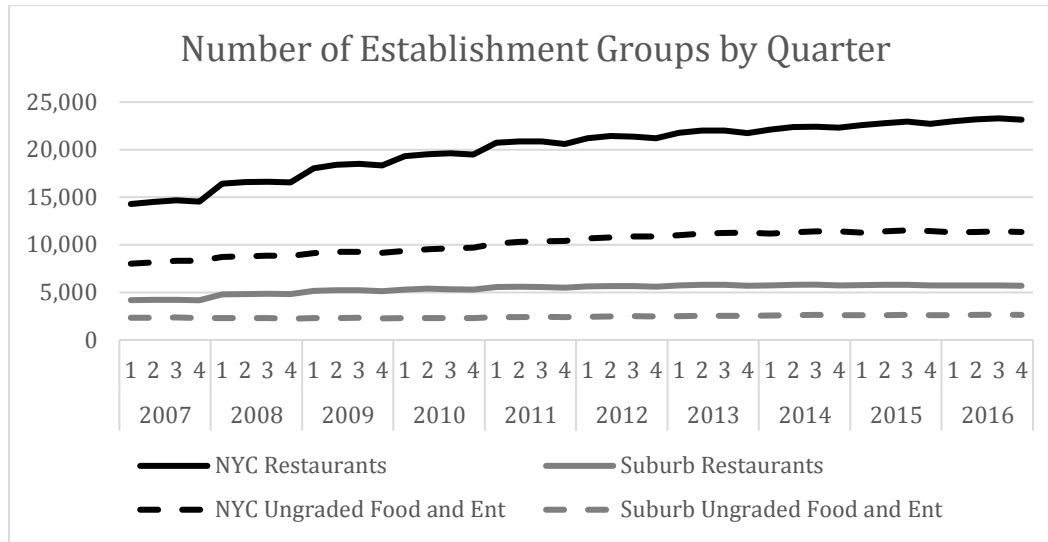


Appendix H. Falsification Test, Inspection Scores, Fines, Revenues, and Sales Taxes, Pre-Post With 1 Year Lead

VARIABLES	Initial Score	Final Score	Fines
Policy Start			
Post	-0.64** (0.31)	-6.76*** (0.27)	-138.92*** (15.86)
Post*Linear	-1.38***	-1.27***	-98.96***
Trend	(0.13)	(0.12)	(7.01)
One Year Before			
Post	-0.76** (0.38)	-0.43 (0.33)	88.83*** (20.04)
Post*Linear	1.30***	1.27***	53.91***
Trend	(0.14)	(0.12)	(7.37)
Linear Trend	-0.34*** (0.06)	-0.34*** (0.05)	-0.32 (2.85)
Seasonal FE	Y	Y	Y
Restaurant/Group	Y	Y	Y
FE			
Constant	23.15*** (0.18)	22.59*** (0.15)	989.98*** (9.39)
Inspections	109,197	120,261	159,617
Restaurants	20,480	20,482	20,485
Observations	--	--	--
Rest-Quarters	--	--	--
R-squared	0.31	0.32	0.32

Robust standard errors clustered by restaurant in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

## Appendix I. Composition of establishments, over time



## Appendix J. Average Sales, By Graded and Ungraded Establishments

