

Online appendix for  
 Too Far Away? The Effect of Distance to Headquarters on  
 Business Establishment Performance

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TABLE A1—ADDITIONAL SPECIFICATIONS FOR DURATION REGRESSIONS

	Table 2, Columns 3 & 4		Adding HQ Zip Code Dummy Vars		Using Distance Indicator Variables
Log Distance to HQ (in miles + 1)	1.09*** (0.001)	1.10*** (0.001)	1.10*** (0.001)	1.11*** (0.001)	
Log Number of Previous Estabs		0.87*** (0.001)		0.87*** (0.001)	
Distance = 0					0.80*** (0.003)
LogDist * 0 < Distance < 5					1.02*** (0.003)
LogDist * 5 ≤ Distance < 10					1.03*** (0.002)
LogDist * Distance ≥ 10					1.04*** (0.001)
Dummy vars:					
SIC Codes	522	522	522	522	522
Estab. Zip Codes	1,503	1,503	1,503	1,503	1,503
HQ Zip Codes			1,821	1,821	
Number of Establishments	1,713,602	1,713,602	1,705,545	1,705,545	1,713,602

*Notes:* Coefficients are exponentiated. All regressions include dummy variables for HQ geocode quality, for establishment geocode quality, for organization type, and for year of founding.

\*\*\* Significant at the 1 percent level. Standard errors (in parentheses) and significance levels are for non-exponentiated coefficients.

TABLE A2—DURATION REGRESSIONS, BY TREATMENT OF ACQUISITIONS

Sample Definition:	Log distance to HQ		Number of Obs.
	Exp. Coefficient	Std. Error	
Acquisitions removed from Sample	1.10***	0.001	1,605,265
Acquisitions only	1.09***	0.003	108,337
To Full Exit of Establishment <sup>†</sup>	1.10***	0.001	1,655,607

*Notes:* All regressions include the variables in Column 4 of Table 2. Coefficients are exponentiated. Standard errors and significance levels are for original coefficients.

<sup>†</sup> At time of acquisition, establishment not considered exiting. Only final exit counted as exit.

\*\*\* Significant at the 1 percent level.

TABLE A3—COMPARING MARGINAL EFFECTS FROM TABLE 4 WITH RESULTS FROM OLS AND IV

	Survival duration of 3 years				Survival duration of 5 years			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
	Marg. Effects from Probit (Table 4)	OLS Coeff.	Marginal Effects, IV Probit Stage 2 (Table 4)	Standard IV Stage 2 Coeff.	Marg. Effects from Probit (Table 4)	OLS Coeff.	Marginal Effects, IV Probit Stage 2 (Table 4)	Standard IV Stage 2 Coeff.
Log Distance to HQ (miles +1)	-0.026	-0.024*** (0.0003)	-0.030	-0.029*** (0.003)	-0.026	-0.025*** (0.0003)	-0.032	-0.032*** (0.003)
Log Previous Estabs Opened	0.047	0.044*** (0.001)	0.049	0.046*** (0.002)	0.038	0.039*** (0.001)	0.041	0.043*** (0.002)
Number of Obs.		1,306,725		1,306,725		1,101,185		1,101,185

TABLE A4—DURATION REGRESSIONS, BY YEAR OF ESTABLISHMENT FOUNDING

Log distance to HQ			
Year	Exp. Coefficient	Std Error	Number of Obs.
1990	1.12***	0.003	100,341
1991	1.10***	0.002	117,190
1992	1.06***	0.002	145,256
1993	1.06***	0.002	142,964
1994	1.07***	0.002	135,606
1995	1.07***	0.002	132,616
1996	1.07***	0.002	118,088
1997	1.09***	0.003	110,630
1998	1.11***	0.003	115,801
1999	1.13***	0.003	119,151
2000	1.14***	0.003	110,168
2001	1.15***	0.003	110,931
2002	1.17***	0.003	125,918
2003	1.18***	0.003	128,942
1990-1996	1.07***	0.001	892,061
1997-2003	1.13***	0.001	821,541

*Notes:* All regressions include the variables in Column 4 of Table 2. Coefficients are exponentiated. Standard errors and significance levels are for original coefficients.

\*\*\* Significant at the 1 percent level.

TABLE A5—DURATION REGRESSIONS, BY TYPE OF OWNER

Type of Owner:	Log distance to HQ		
	Exp. Coefficient	Std Error	Number of Obs.
Proprietorship	1.09***	0.001	1,186,384
Texan Corp.	1.17***	0.002	303,621
General Partnership	1.03***	0.002	150,445
Texan Limited Liability Co.	1.20***	0.006	26,602
Limited Partnership	1.10***	0.006	25,819
Foreign Corp.	1.06***	0.006	20,731

*Notes:* All regressions include the variables in Column 4 of Table 2. Coefficients are exponentiated. Standard errors and significance levels are for original coefficients.

\*\*\* Significant at the 1 percent level.

TABLE A6—DURATION REGRESSIONS, BY INDUSTRY

Sector	Log distance to HQ		Number of Obs.
	Exp. Coefficient	Std Error	
Retail	1.09***	0.001	1,034,461
Services	1.12***	0.001	384,228
Other	1.12***	0.002	294,913
4-digit SIC industries			
Restaurants	1.07***	0.003	111,920
Gift, novelty and souvenir shops	1.07***	0.002	121,879
Beauticians/Hair Salons	1.13***	0.007	26,559
Auto supply stores	1.12***	0.006	22,444
Florists	1.13***	0.008	15,604
Women's clothing stores	1.09***	0.007	15,072
Used car dealerships	1.16***	0.009	13,271
Photo and portrait studios	1.17***	0.009	12,129
McDonald's	1.07**	0.033	1,307

*Notes:* All regressions include the variables in Column 4 of Table 2, except of course, SIC dummy variables are excluded from the sector specific and McDonald's regression. Also, there are not enough cases of more than one McDonald's in a zip code to include zip code dummy variables in this last regression. Coefficients are exponentiated. Standard errors and significance levels are for original coefficients.

\*\*\* Significant at the 1 percent level.

\*\* Significant at the 5 percent level.

TABLE A7—DURATION REGRESSIONS, BY LOCATION

	Log distance to HQ		Number of Obs.
	Exp. Coefficient	Std Error	
Type of Address:			
Home/office	1.05***	0.001	526,206
Any Establishment <sup>†</sup>	1.17***	0.001	840,710
PO Box	1.07***	0.002	346,686
Type of Location:			
Urban	1.10***	0.001	819,653
Rural	1.10***	0.001	893,949
Alternative Distance Measure:			
Log(Order of Contiguity +1)	1.15***	0.001	1,711,361

Notes: All regressions include the variables in Column 4 of Table 2. Coefficients are exponentiated. Standard errors and significance levels are for original coefficients.

<sup>†</sup> Address of HQ corresponds to address of an establishment of the owner, whether focal or other.

\*\*\* Significant at the 1 percent level.

TABLE A8—PROBIT AND IV PROBIT REGRESSIONS SPLITTING URBAN AND RURAL COUNTIES

	Survival duration							
	3 years				5 years			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
	Urban Counties		Rural Counties		Urban Counties		Rural Counties	
	Probit	IV Probit Stage 2	Probit	IV Probit Stage 2	Probit	IV Probit Stage 2	Probit	IV Probit Stage 2
Log Distance to HQ (miles + 1)	-0.067*** (0.001)	-0.060*** (0.013)	-0.071*** (0.001)	-0.073*** (0.005)	-0.084*** (0.001)	-0.071*** (0.015)	-0.084*** (0.001)	-0.093*** (0.006)
Log Previous Estabs Opened	0.121*** (0.003)	0.118*** (0.006)	0.125*** (0.003)	0.126*** (0.004)	0.122*** (0.003)	0.116*** (0.007)	0.122*** (0.003)	0.127*** (0.005)
Number of Establishments	639,660	639,660	666,483	666,483	542,506	542,506	557,974	557,974

*Note:* The identical coefficient of -.084 for both urban and rural counties is correct: The differences in effects are very small.

\*\*\* Significant at the 1 percent level.



TABLE A9—EFFECT OF DISTANCE TO HQ ON HAZARD RATIO, URBAN AND RURAL AREAS

	HQ is:	
	Urban	Rural
Establishment is:		
Urban	1.13*** (0.001) N = 742,230	1.06*** (0.004) N = 77,423
Rural	1.07*** (0.005) N = 67,585	1.09*** (0.001) N = 826,364

*Notes:* All regressions include the variables in Column 4 of Table 2. Coefficients are exponentiated. Standard errors and significance levels are for original coefficients.

\*\*\* Significant at the 1 percent level.