Problem Set #4

Danny Edgel
Econ 761: Industrial Organization Theory
Fall 2021

November 9, 2021

1. Table 1 below displays the results of the probit estimations, which are conducted in edgel_ps4.do.

Table 1

	$\mathbb{1}\{WalMart\}$	$\mathbb{1}\{KMart\}$
$\mathbb{1}\{KMart\}$	-0.476	
	(0.100)	
$\mathbb{1}\{WalMart\}$		0.098
		(0.098)
% Urban	1.820	1.733
	(0.170)	(0.206)
$\log(Population)$	1.641	1.562
	(0.076)	(0.096)
$\mathbb{1}\{Midwest\}$	0.983	0.568
	(0.131)	(0.139)
$\mathbb{1}\{South\}$	1.302	0.085
	(0.130)	(0.138)
Pseudo R^2	0.390	0.350
Log-likelihood	-1429	-1005
Obs.	2,065	2,065

Standard errors in parentheses; both specifications include an unreported intercept.

The biggest weakness of this model is that it does not account for the timing of entry between each firm and the fact that each firm is choosing to enter strategically, based on whether and when the other firm enters. Specifically, these decisions are not modeled as simultaneous equations, even though they fundamentally are. Furthermore, this omits key profit determinants, such as household income and the number of small firms prior to entry.[1]

[1] The author's data do include such variables, but without a common identifier betwwen

data78.out and XMat.out, we cannot merge the two files.