Department of Economics
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Industrial Organization/Homework 1

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1. Question 1

1.1. Summary Stat for all Obs

Stats	ldsal	lemp	ldnpt	ldrst	ldrnd	ldinv
Mean	5.673	1.259	4.469	3.401	1.788	2.675
SD	1.961	1.775	2.217	2.029	2.052	2.17
Min	-.8573	-3.772	-1.389	-4.287	-5.313	-3.844
p25	4.25	-.02532	2.946	1.989	.3504	1.12
p50	5.529	1.114	4.212	3.177	1.631	2.506
p75	7.084	2.632	6.001	4.792	3.189	4.199
Max	11.7	6.732	11.11	9.966	8.432	8.989
N	2971	2971	2971	2971	2971	2971

Figura 1: Summary Stat for all Obs

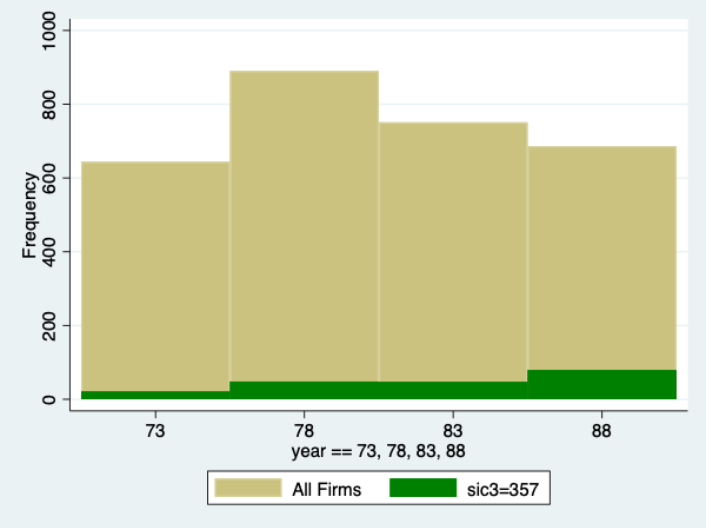

Figura 2: Number of All Firms and SIC3=357

1.2. Summary Stat for Obs with at lease 2 Year

Stats	ldsal	lemp	ldnpt	ldrst	ldrnd	ldinv
Mean	5.918	1.506	4.767	3.666	2.018	2.926
SD	1.943	1.734	2.179	2.007	2.053	2.167
Min	-.8573	-3.772	-1.389	-2.613	-4.305	-3.844
p25	4.485	.2042	3.177	2.241	.6071	1.385
p50	5.799	1.348	4.573	3.456	1.846	2.773
p75	7.4	2.89	6.378	5.147	3.464	4.495
Max	11.7	6.732	11.11	9.966	8.432	8.888
N	2440	2440	2440	2440	2440	2440

Figura 3: Summary Stat for Obs with at lease 2 Year

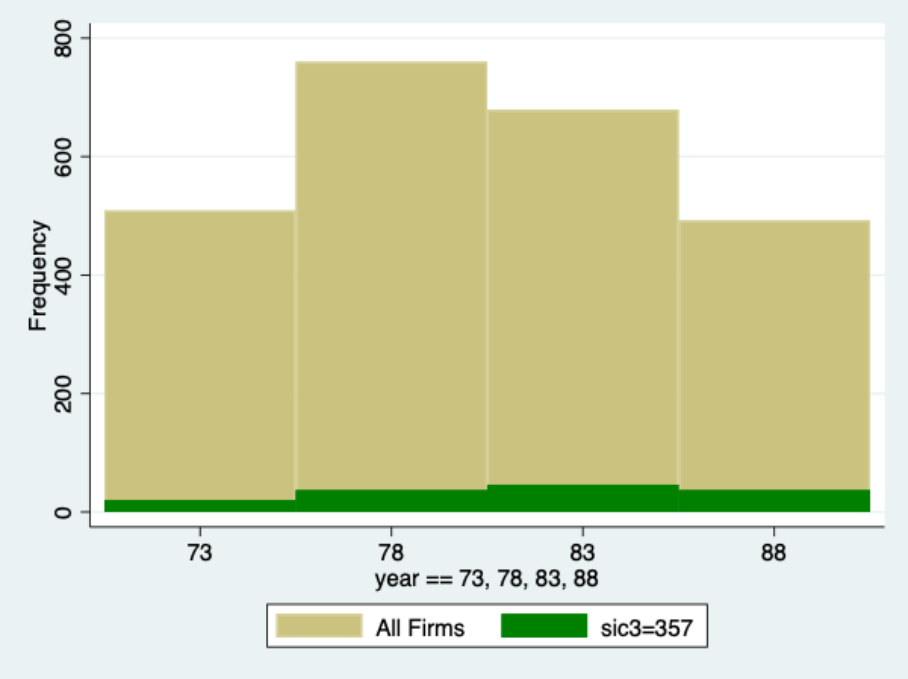

Figura 4: Number of All Firms and SIC3=357 with at lease 2 Year

1.3. Summary Stat for Balanced Panel

Stats	ldsal	lemp	ldnpt	ldrst	ldrnd	ldinv
Mean	6.914	2.413	5.916	4.886	3.222	4.069
SD	1.838	1.622	2.057	1.93	1.994	2.055
Min	1.664	-2.071	.8057	.06245	-2.711	-2.076
p25	5.559	1.132	4.275	3.291	1.64	2.465
p50	7.057	2.652	6.032	5.109	3.403	4.234
p75	8.272	3.627	7.423	6.287	4.673	5.568
Max	11.7	6.732	11.11	9.966	8.432	8.888
N	856	856	856	856	856	856

Figura 5: Summary Stat for Balanced Panel

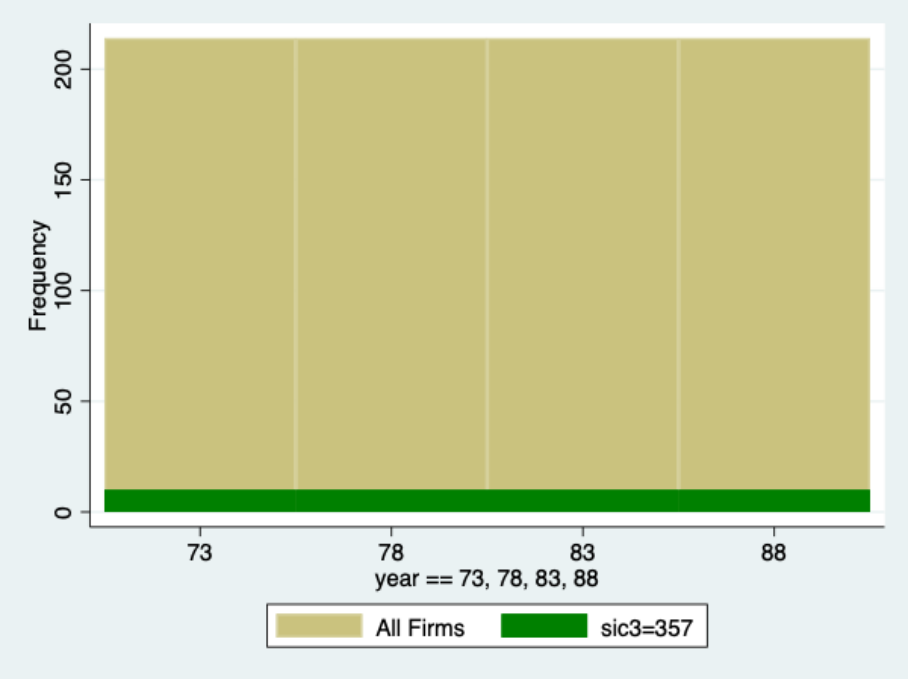

Figura 6: Number of All Firms and SIC3=357 in Balanced Panel

1.4. What does it suggest?

As we can see, summary stat of data is changing. For example, mean of variables are increasing. This suggests that firms which are larger, stay for a longer time in our data.

2. Question 2

	(1) Total	(2) Between	(3) Within	(4) Random
lemp	0.496***	0.473***	0.685***	0.598***
	(22.44)	(11.15)	(23.16)	(23.94)
ldnpt	0.460***	0.481***	0.180***	0.335***
	(31.98)	(18.00)	(6.74)	(17.32)
ldrst	0.0335*	0.0315	0.0989***	0.0645***
	(2.19)	(1.09)	(3.63)	(3.34)
73.yr	0	0	0	0
	(.)	(.)	(.)	(.)
78.yr	0.0137	0	0.0484**	0.0266
	(0.42)	(.)	(2.93)	(1.59)
83.yr	-0.125***	0	-0.0107	-0.0762***
	(-3.75)	(.)	(-0.53)	(-4.10)
88.yr	0.163***	0	0.244***	0.196***
	(4.87)	(.)	(11.18)	(10.22)
d357_73	-3.235***	-5.688***	-3.421***	-3.295***
	(-30.20)	(-14.44)	(-44.68)	(-29.94)
d357_78	-2.064***	0	-2.286***	-2.143***
	(-19.22)	(.)	(-30.44)	(-19.37)
d357_83	-0.689***	0	-0.944***	-0.791***
	(-6.38)	(.)	(-12.73)	(-7.09)
d357_88	0.240*	0	0	0.144
	(2.22)	(.)	(.)	(1.29)
_cons	2.887***	2.838***	3.717***	3.208***
	(52.89)	(27.84)	(32.26)	(45.04)
N	856	856	856	856

t statistics in parentheses

* $p < 0{,}05$, ** $p < 0{,}01$, *** $p < 0{,}001$

Cuadro 1: Regression Results