

Honors Thesis Project - Sample Analysis

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- 1 Sample Summary Statistics**
- 2 Is there correlation?**
- 3 Appendix A - Tables**

Table 1: Summary Statistics Sample Comparison

	Mean sample1		Standard deviation sample1		Number of nonmissing values sample1	
	In sample	Total	In sample	Total	In sample	Total
educ14	10.62764	10.20812	3.581689	3.724637	5,637	8,394
kinder_ever	.3526707	.3266373	.4778435	.4690112	5,654	8,413
kinder_age	4.807186	4.856775	.7622545	.7495328	1,976	2,716
ln_total_ek00	-.4510153	-.4799265	.3881816	.4158693	5,752	8,509
ln_total_ek07	-.472172	-.5057766	.4140162	.4359776	5,708	8,461
ln_total_ek14	-.5943113	-.6364638	.4323223	.455001	5,351	7,949
exit_age	19.64574	19.92175	3.340343	3.987758	2,326	2,543
educ_hh	5.770117	5.988074	4.16528	4.490538	5,468	38,069
television	.6023102	.6104519	.4894656	.4876543	5,454	37,754
ln_agg_expend_r_pc	12.16187	12.29839	.6951017	.7894142	5,447	37,666
male	.4871143	.4744393	.4998763	.4993747	5,898	8,783
urban_97	.4170781	.4773174	.4931211	.4994918	5,469	38,157

Table 2: Summary Statistics by Kindergarten Attendance

	kinder_ever					
	Kindergarten			No kindergarten		
	Mean	Standard deviation	Number of nonmissing values	Mean	Standard deviation	Number of nonmissing values
educ14	12.0314	3.030843	2,739	9.325944	3.709209	2,739
kinder_ever	1	0	2,748	0	0	2,748
kinder_age	4.856775	.7495328	2,716	.	.	2,716
ln_total_ek00	-.373779	.339011	2,698	-.536363	.4409203	2,698
ln_total_ek07	-.3715183	.3453969	2,659	-.5730464	.4604345	2,659
ln_total_ek14	-.5026843	.4005316	2,597	-.7014757	.4657419	2,597
exit_age	20.38156	3.719291	1,182	19.51214	4.156506	1,182
educ_hh	7.471744	4.3339	2,442	4.81147	3.768694	2,442
television	.7445496	.4362038	2,431	.5399511	.4984522	2,431
ln_agg_expend_r_pc	12.4003	.7283247	2,425	12.08572	.6764238	2,425
male	.4546778	.4980323	2,747	.4769557	.4995128	2,747
urban_97	.5809758	.4935005	2,439	.3586669	.4796579	2,439

Table 3: Pair-Wise Correlations

	educ14 C	kinder_ever C	kinder_age C	exit_age C
educ14	1	.3407515	-.1766645	.6874146
kinder_ever	.3407515	1	.	.1089228
kinder_age	-.1766645	.	1	-.0230459
ln_total_ek00	.3405999	.1843092	-.0765639	.2119595
ln_total_ek07	.3744616	.2174991	-.1352864	.0676594
ln_total_ek14	.4239216	.2049251	-.0906032	.1757195
exit_age	.6874146	.1089228	-.0230459	1
educ_hh	.474741	.3012767	-.1293105	.217544
television	.3481567	.1972398	-.1017699	.1288739
ln_agg_expend_r_pc	.3164911	.2086126	-.0453166	.1879715
male	.0120821	-.0209344	.034774	-.0711425
urban_97	.2459751	.2112297	-.1024224	.0504692

Table 4: Kindergarten attendance rates, by province and urban status

	Mean ages 30 to 32	Mean ages 27 to 29	Mean ages 24 to 26	Mean ages 21 to 23	Mean ages 18 to 20
12. North Sumatra					
not urban	0	0	.1395349	.06	0
urban	.1428571	.2363636	.3095238	.4285714	.5
13. West Sumatra					
not urban	.2666667	.3921569	.3714286	.2820513	1
urban	.4242424	.7096774	.6764706	.68	.6666667
16. South Sumatra					
not urban	.0178571	.0588235	.0769231	.02	
urban	.3043478	.4285714	.4285714	.65	
18. Lampung					
not urban	.25	.2321429	.1702128	.195122	0
urban	.1818182	.1428571	.3333333	.2857143	
31. Jakarta					
urban	.1573034	.2741935	.3809524	.4507042	
32. West Java					
not urban	.0165289	.0654206	.1048951	.1060606	0
urban	.2315789	.3150685	.3538462	.371134	0
33. Central Java					
not urban	.5641026	.5353535	.5353535	.6330275	1
urban	.6282051	.6607143	.7857143	.765625	1
34. Yogyakarta					
not urban	.7727273	.75	.8275862	.84375	
urban	.7058824	.9285714	.8461538	.9705882	
35. East Java					
not urban	.45	.3913043	.373494	.4716981	0
urban	.721519	.84375	.9107143	.9777778	
51. Bali					
not urban	.15	.1363636	.12	.2424242	0
urban	.2962963	.3913043	.5	.5625	1
52. W. Nusa Tenggara					
not urban	.1538462	.1538462	.1869159	.2179487	.1666667
urban	.3333333	.1818182	.2142857	.3703704	.5
63. South Kalimantan					
not urban	.106383	.125	.0555556	.1578947	0
urban	.4705882	.4285714	.7333333	.5714286	0
73. South Sulawesi					
not urban	.0851064	.1351351	.3529412	.2325581	0
urban	.1333333	.2068966	.2962963	.2333333	0

Table 5: Number of observations for kindergarten attendance, by province and urban status

	N ages 30 to 32	N ages 27 to 29	N ages 24 to 26	N ages 21 to 23	N ages 18 to 20
12. North Sumatra					
not urban	39	43	43	50	2
urban	70	55	42	49	2
13. West Sumatra					
not urban	45	51	35	39	1
urban	33	31	34	25	3
16. South Sumatra					
not urban	56	68	52	50	
urban	23	28	28	20	
18. Lampung					
not urban	48	56	47	41	1
urban	11	7	12	7	
31. Jakarta					
urban	89	62	84	71	
32. West Java					
not urban	121	107	143	132	6
urban	95	73	65	97	1
33. Central Java					
not urban	117	99	99	109	3
urban	78	56	56	64	2
34. Yogyakarta					
not urban	22	28	29	32	
urban	34	28	26	34	
35. East Java					
not urban	120	92	83	106	2
urban	79	64	56	45	
51. Bali					
not urban	40	44	50	33	3
urban	27	23	28	16	1
52. W. Nusa Tenggara					
not urban	78	78	107	78	12
urban	24	33	14	27	2
63. South Kalimantan					
not urban	47	32	36	38	3
urban	17	14	15	21	1
73. South Sulawesi					
not urban	47	37	34	43	1
urban	30	29	27	30	1

Table 6: Kindergarten attendance rates, by age cohort

	Mean ages 30 to 32	Mean ages 27 to 29	Mean ages 24 to 26	Mean ages 21 to 23	Mean ages 18 to 20
12. North Sumatra					
below median household expenditure	.0566038	.0208333	.1219512	.12	0
above median household expenditure	.125	.24	.3181818	.3673469	.5
13. West Sumatra					
below median household expenditure	.2162162	.4634146	.4242424	.21875	0
above median household expenditure	.4390244	.5609756	.6111111	.65625	1
16. South Sumatra					
below median household expenditure	0	.0833333	.0731707	.0857143	
above median household expenditure	.2051282	.25	.3333333	.3142857	
18. Lampung					
below median household expenditure	.2666667	.3548387	.2068966	.16	
above median household expenditure	.2068966	.09375	.2	.2608696	0
31. Jakarta					
below median household expenditure	.0425532	.0645161	.1904762	.2702703	
above median household expenditure	.2857143	.483871	.5714286	.6470588	
32. West Java					
below median household expenditure	.0530973	.0574713	.1442308	.1610169	0
above median household expenditure	.1747573	.2688172	.2211538	.2792793	0
33. Central Java					
below median household expenditure	.5154639	.5526316	.6103896	.6395349	1
above median household expenditure	.6632653	.6075949	.6410256	.7241379	1
34. Yogyakarta					
below median household expenditure	.7142857	.8076923	.7142857	.9090909	
above median household expenditure	.75	.8666667	.962963	.9090909	
35. East Java					
below median household expenditure	.5	.4556962	.4057971	.5	0
above median household expenditure	.62	.7051282	.7714286	.75	0
51. Bali					
below median household expenditure	.0588235	.1142857	.0263158	.0416667	0
above median household expenditure	.3636364	.34375	.475	.64	.5
52. W. Nusa Tenggara					
below median household expenditure	.1176471	.0740741	.0666667	.1730769	.2857143
above median household expenditure	.2745098	.245614	.3114754	.3396226	.1428571
63. South Kalimantan					
below median household expenditure	.1612903	.173913	.16	.1724138	0
above median household expenditure	.2424242	.2608696	.3461538	.4333333	0
73. South Sulawesi					
below median household expenditure	0	.0606061	.1666667	.1428571	0
above median household expenditure	.2051282	.2727273	.483871	.3157895	0
above median household expenditure	.297619	.3571429	.483871	.4411765	.5714286

Table 7: Number of observations, by age cohort

	N ages 30 to 32	N ages 27 to 29	N ages 24 to 26	N ages 21 to 23	N ages 18 to 20
12. North Sumatra					
below median household expenditure	53	48	41	50	2
above median household expenditure	56	50	44	49	2
13. West Sumatra					
below median household expenditure	37	41	33	32	1
above median household expenditure	41	41	36	32	3
16. South Sumatra					
below median household expenditure	40	48	41	35	
above median household expenditure	39	48	39	35	
18. Lampung					
below median household expenditure	30	31	29	25	
above median household expenditure	29	32	30	23	1
31. Jakarta					
below median household expenditure	47	31	42	37	
above median household expenditure	42	31	42	34	
32. West Java					
below median household expenditure	113	87	104	118	3
above median household expenditure	103	93	104	111	4
33. Central Java					
below median household expenditure	97	76	77	86	2
above median household expenditure	98	79	78	87	3
34. Yogyakarta					
below median household expenditure	28	26	28	33	
above median household expenditure	28	30	27	33	
35. East Java					
below median household expenditure	100	79	69	76	1
above median household expenditure	100	78	70	76	1
51. Bali					
below median household expenditure	34	35	38	24	2
above median household expenditure	33	32	40	25	2
52. W. Nusa Tenggara					
below median household expenditure	51	54	60	52	7
above median household expenditure	51	57	61	53	7
63. South Kalimantan					
below median household expenditure	31	23	25	29	2
above median household expenditure	33	23	26	30	2
73. South Sulawesi					
below median household expenditure	38	33	30	35	1
above median household expenditure	39	33	31	38	1
above median household expenditure	168	70	93	136	7

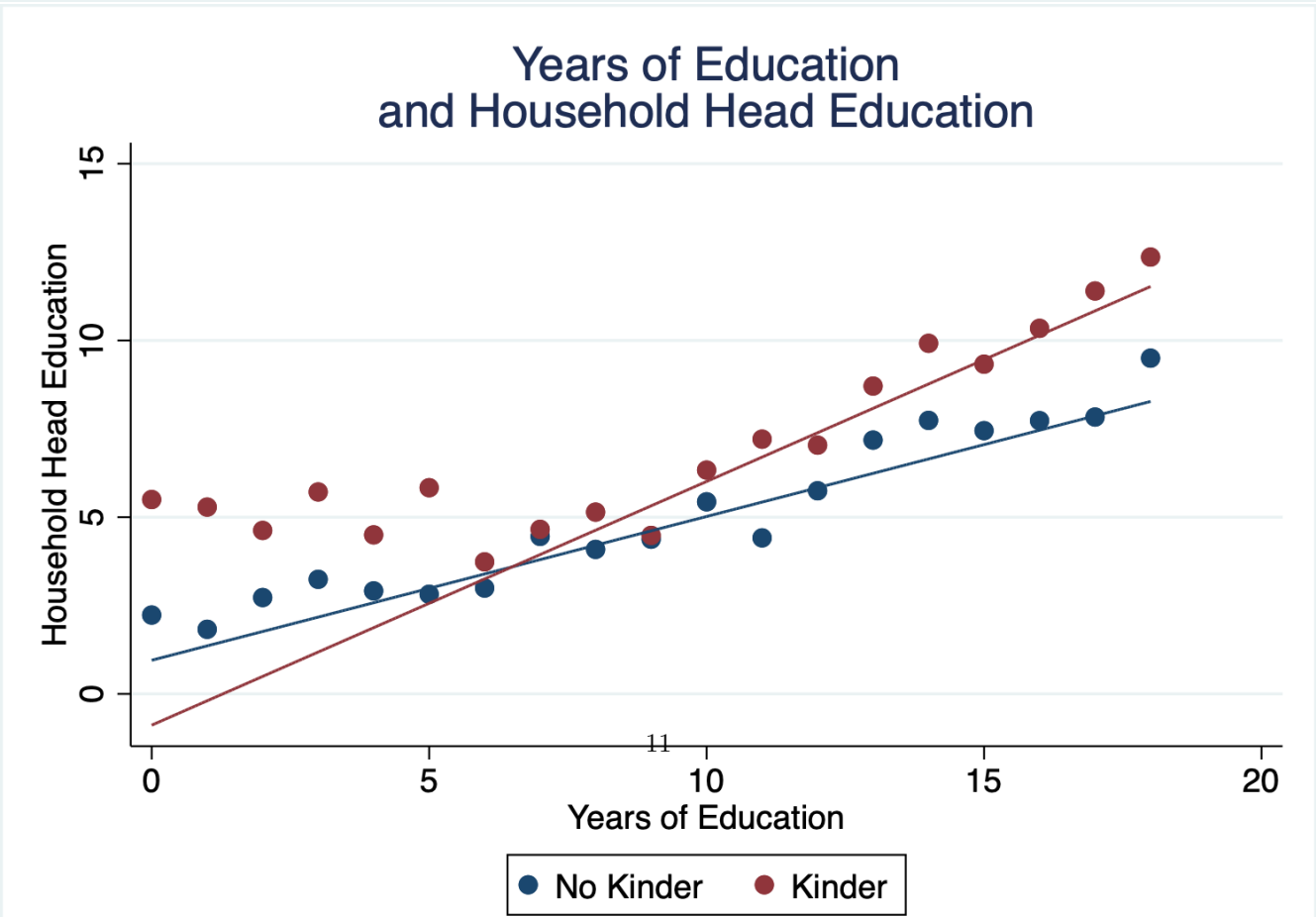
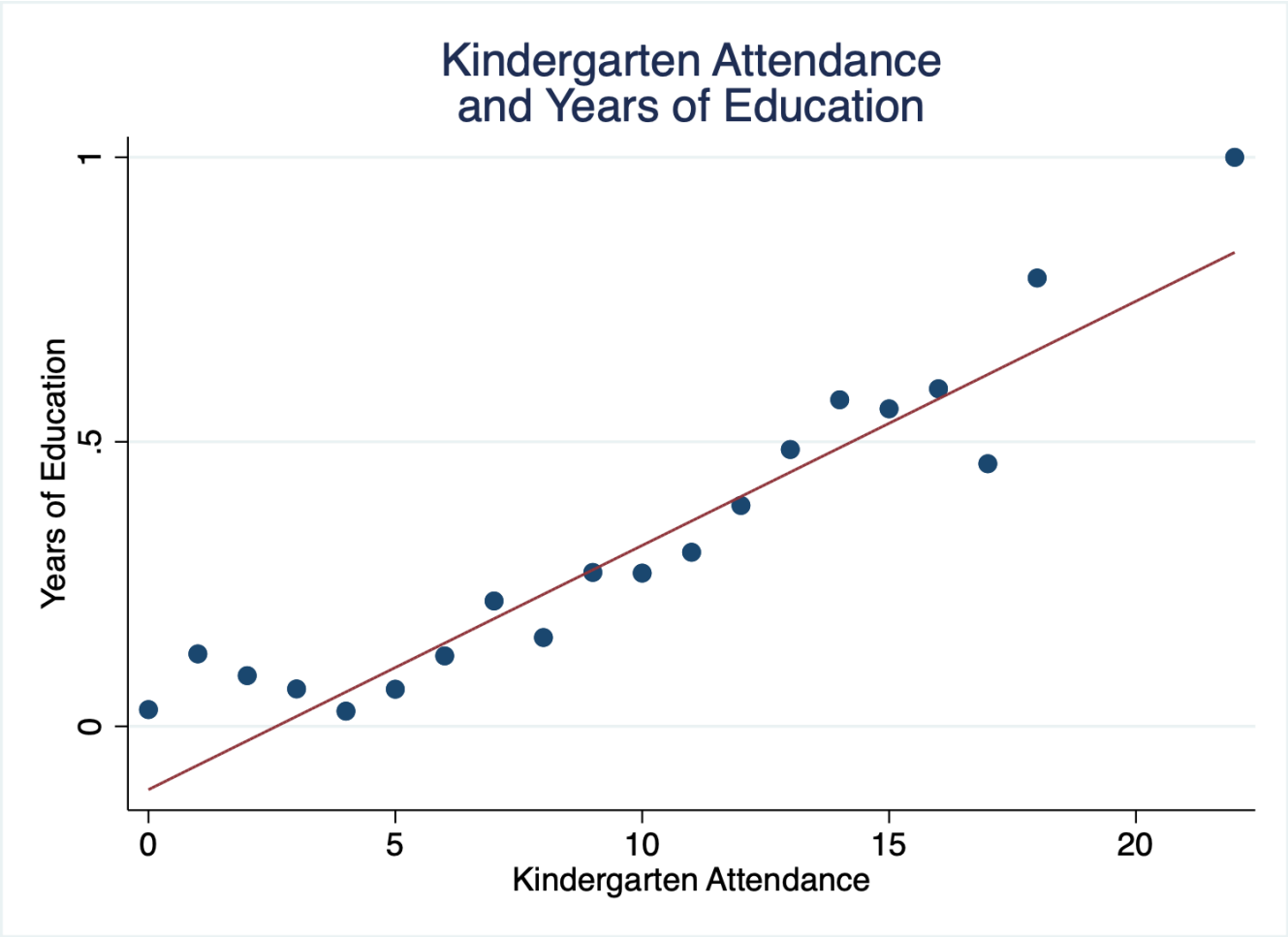
Table 8: Preliminary regression findings, robust standard errors

	(1)	(2)	(3)
	educ14	educ14	educ14
kinder_ever	2.608*** (0.0769)	1.273*** (0.0714)	2.461*** (0.0797)
educ_hh		0.256*** (0.00928)	
ln_agg_expend_r_pc		0.687*** (0.0544)	
television		1.149*** (0.0820)	
urban_97		0.467*** (0.0726)	
male		-0.0190 (0.0682)	0.0275 (0.0741)
cohort2		0.765*** (0.0986)	0.574*** (0.108)
cohort3		1.083*** (0.0993)	0.935*** (0.109)
cohort4		1.343*** (0.0942)	1.189*** (0.102)
cohort5		1.133*** (0.220)	1.035*** (0.223)
_cons	9.498*** (0.0509)	-1.362* (0.645)	9.060*** (0.0742)
N	7892	7837	7889
adj. R^2	0.112	0.326	

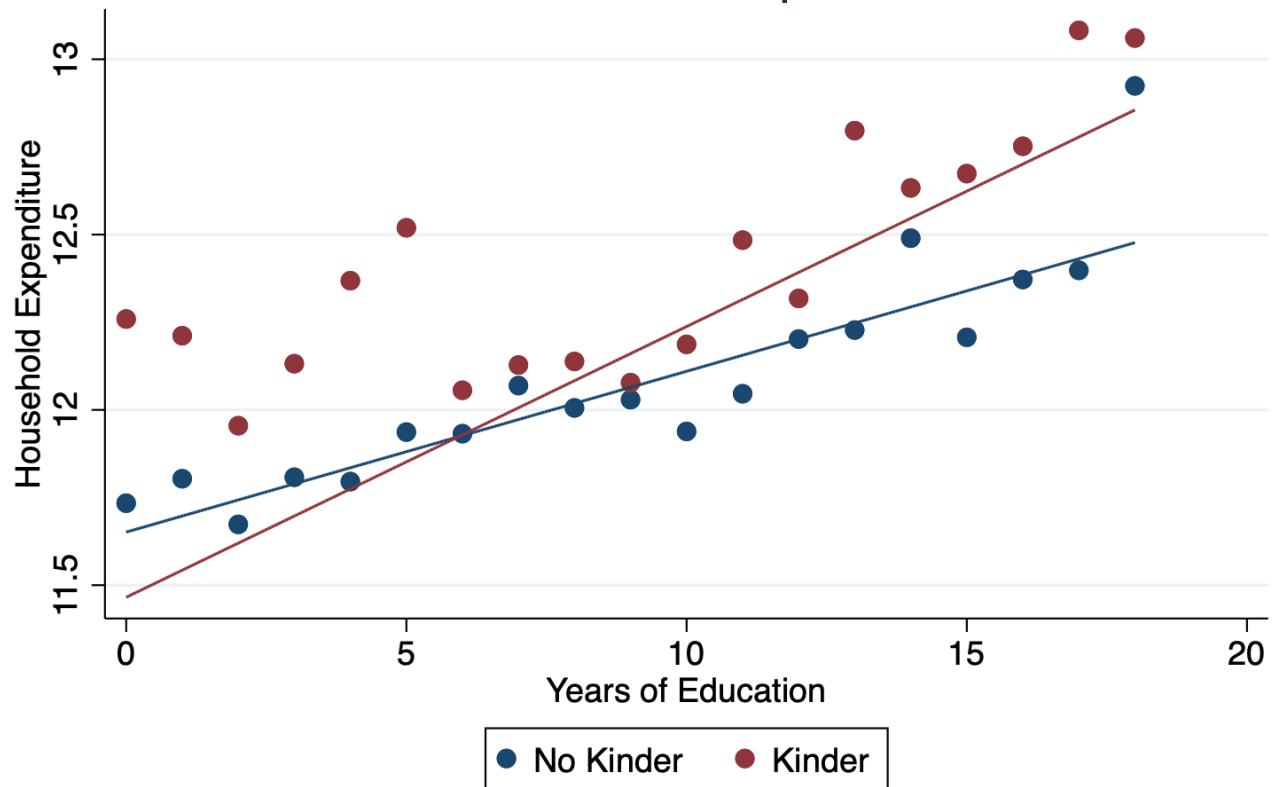
Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

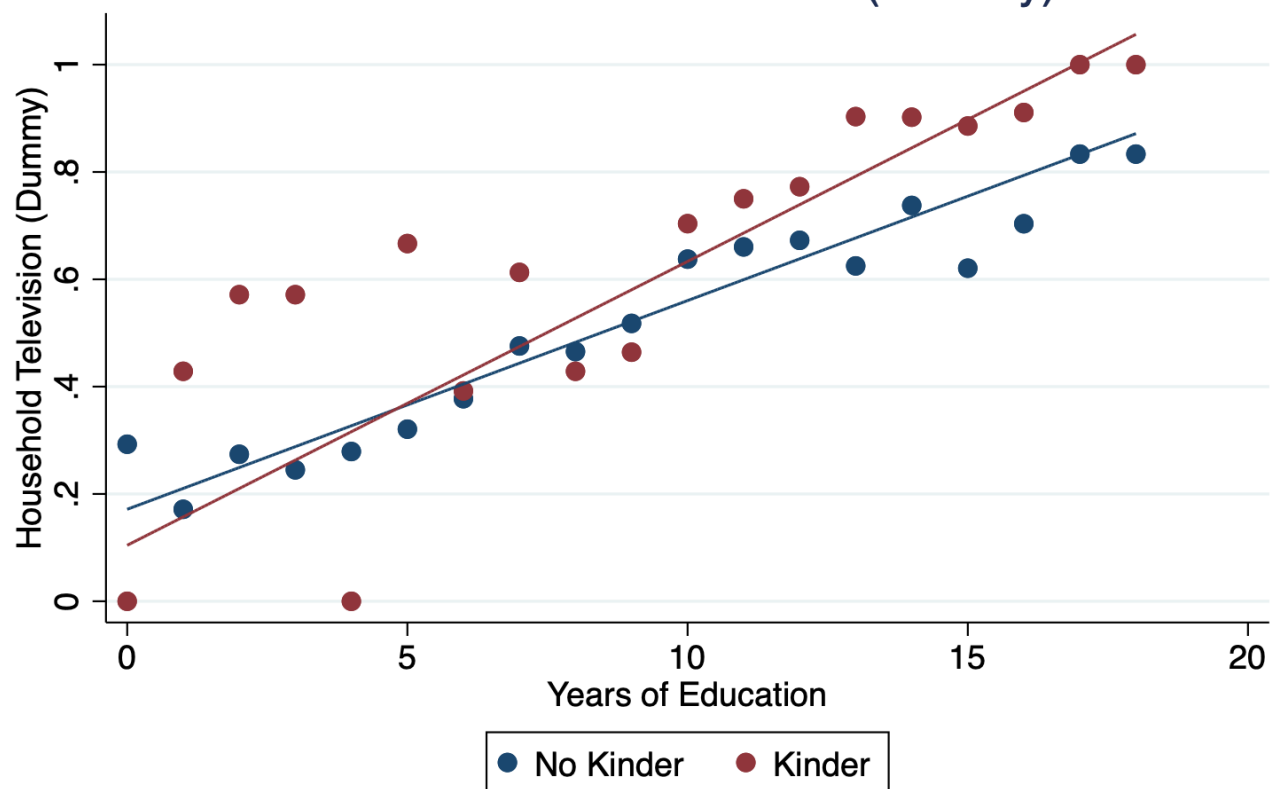
4 Appendix B - Graphs



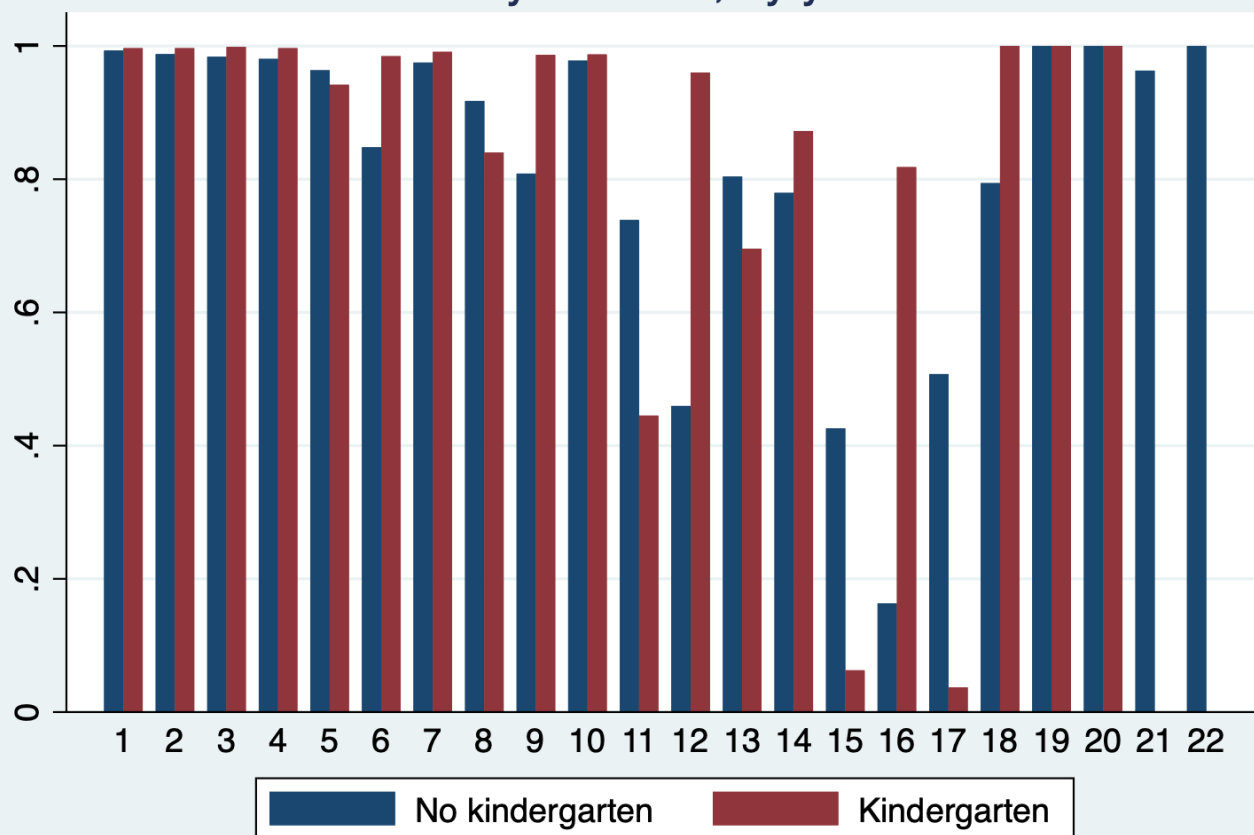
Years of Education and Household Expenditure



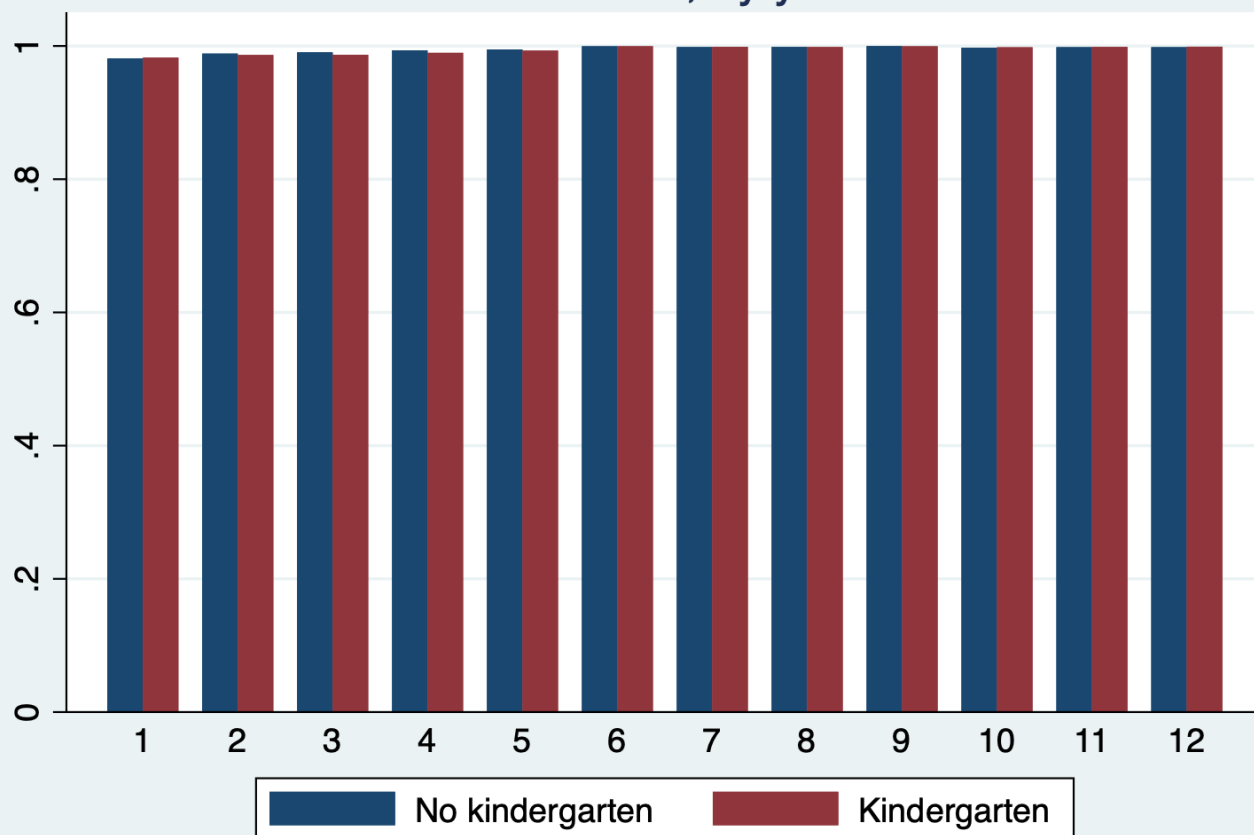
Years of Education and Household Television (Dummy)



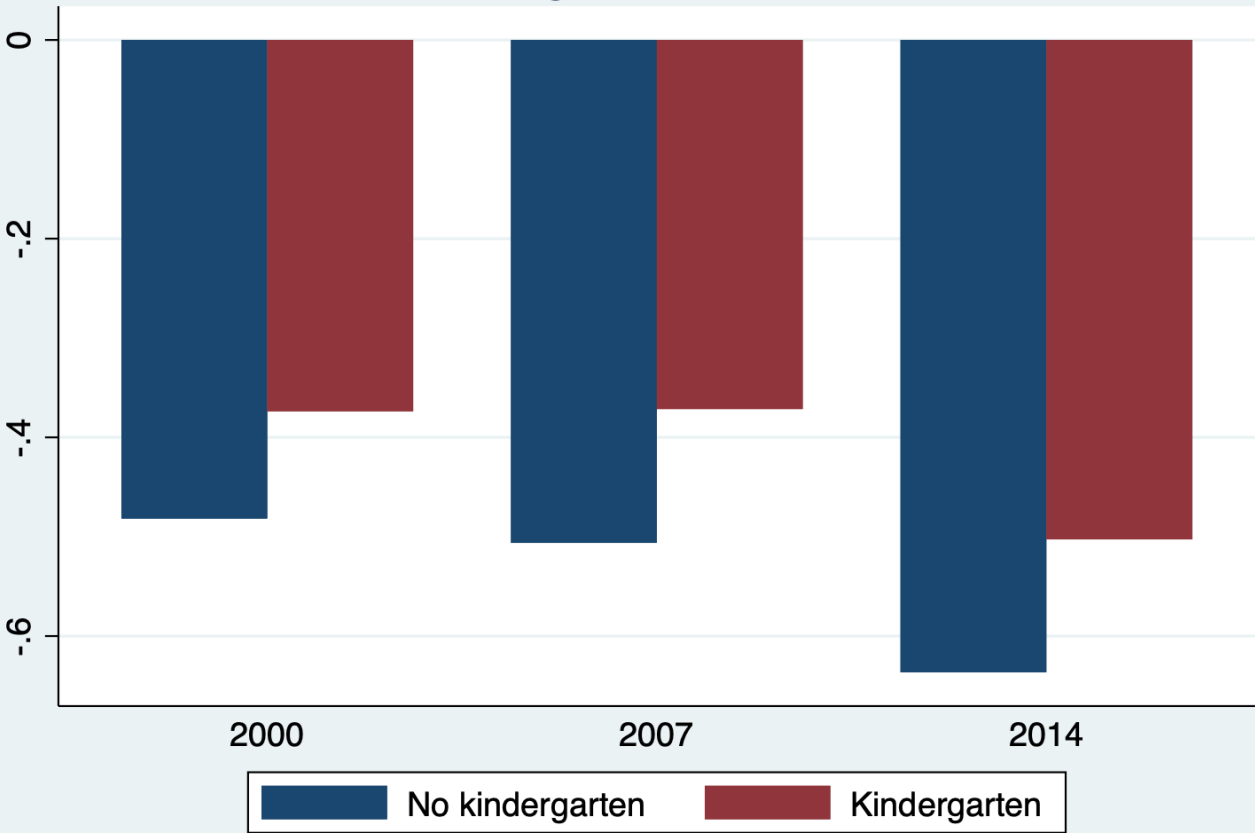
Stay on rates, by year

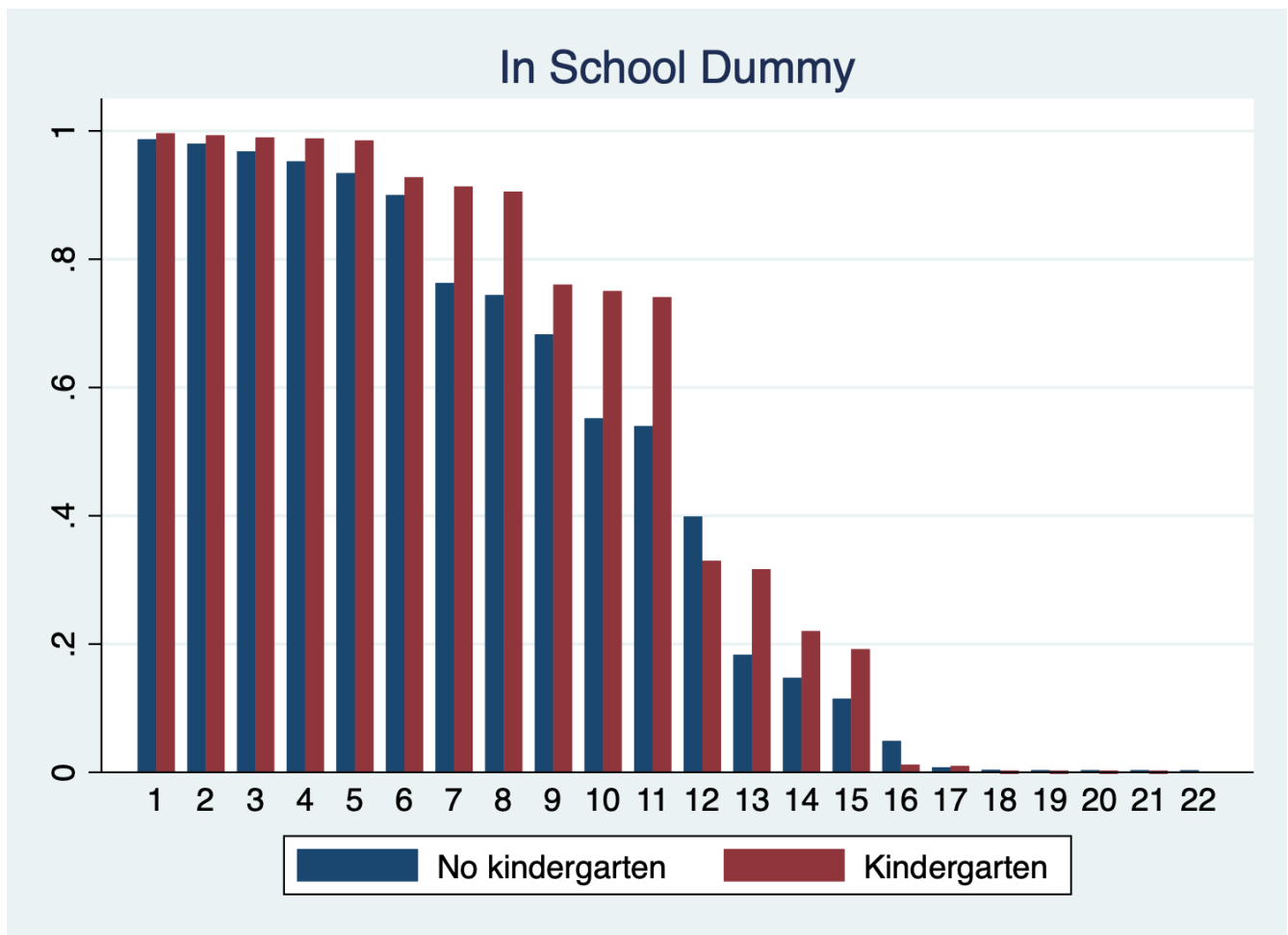


Pass rates, by year



Average $\ln(EK)$ scores





5 Bibliography

References

- [1] Samuel Berlinski, Sebastian Galiani, and Marco Manacorda. Giving children a better start: Preschool attendance and school-age profiles. *Journal of Public Economics*, 92(5):1416–1440, 2008. ID: 271705.