

Elite Law - Third Analysis

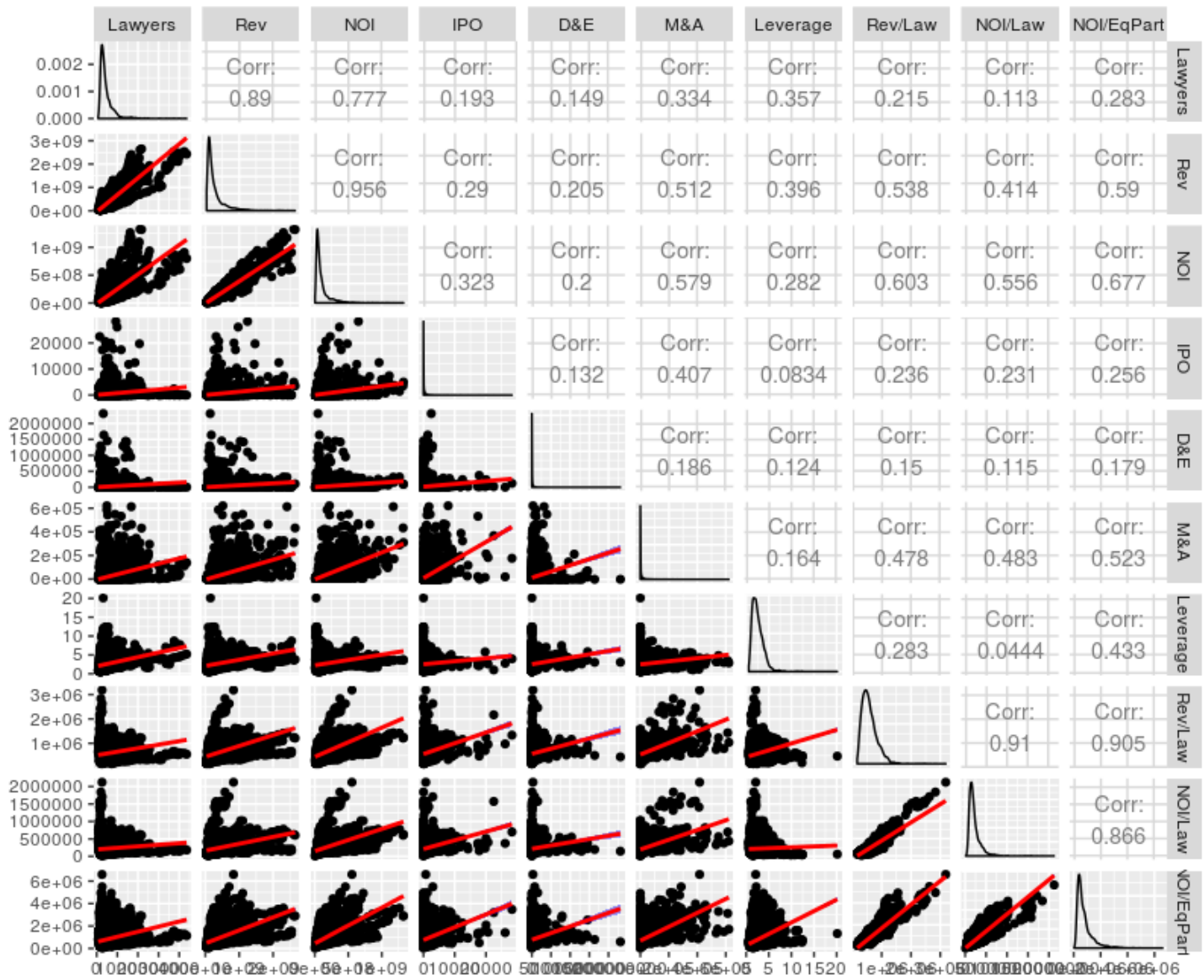
Dan Zylberglejd

March 2017

Summary statistics

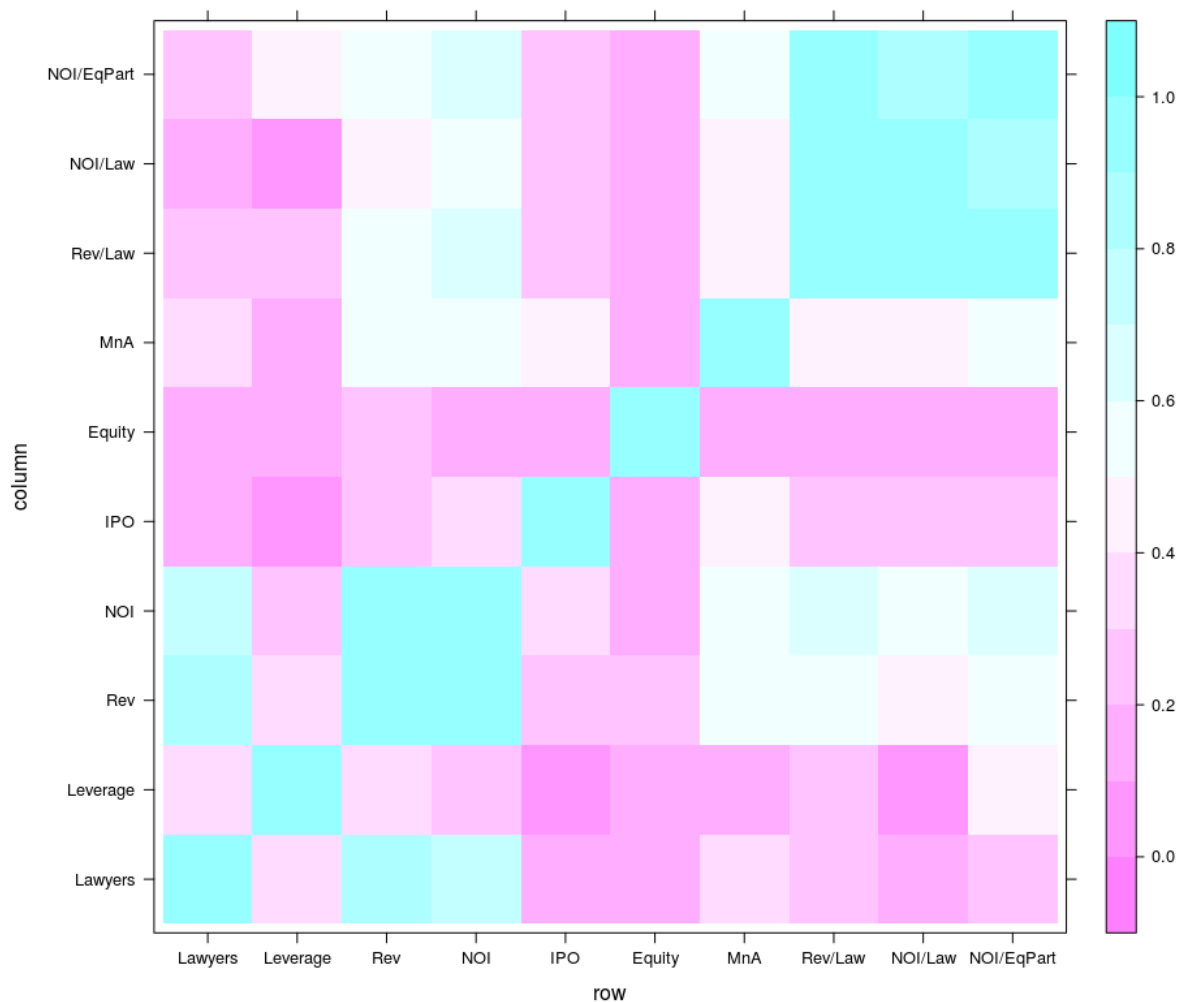
	Lawyers	Leverage	GrossRev	NOI	IPO	D&E	M&A	Rev/Lawyer	NOI/Lawyer	NOI
Min	72.0	0.58	3.7e+07	3.4e+06	0.0	0.0	0.0	164706	11940	3022
1st Q	251.0	1.63	1.1e+08	3.8e+07	0.0	0.0	0.0	397158	132384	4000
Median	349.0	2.29	1.8e+08	6.4e+07	0.0	999.5	170.6	531983	180972	5990
Mean	465.4	2.568	2.9e+08	1.1e+08	391.6	19285.3	16839.6	582676	221904	8007
3rd Q	534.0	3.19	3.3e+08	1.2e+08	205.4	6639.7	5969.7	710288	260914	9521
Max	4363.0	20.13	2.6e+09	1.3e+09	28318.0	2311278.3	621370.0	3185824	2124521	6601

Scatter Plots



Correlations

	Lawyers	Leverage	Rev	NOI	IPO	D&E	M&A	Rev/Law	NOI/Law	NOI/EqPart
Lawyers	1.00	0.36	0.89	0.78	0.19	0.15	0.33	0.21	0.11	0.28
Leverage	0.36	1.00	0.40	0.28	0.08	0.12	0.16	0.28	0.04	0.43
Rev	0.89	0.40	1.00	0.96	0.29	0.20	0.51	0.54	0.41	0.59
NOI	0.78	0.28	0.96	1.00	0.32	0.20	0.58	0.60	0.56	0.68
IPO	0.19	0.08	0.29	0.32	1.00	0.13	0.41	0.24	0.23	0.26
D&E	0.15	0.12	0.20	0.20	0.13	1.00	0.19	0.15	0.11	0.18
M&A	0.33	0.16	0.51	0.58	0.41	0.19	1.00	0.48	0.48	0.52
Rev/Law	0.21	0.28	0.54	0.60	0.24	0.15	0.48	1.00	0.91	0.91
NOI/Law	0.11	0.04	0.41	0.56	0.23	0.11	0.48	0.91	1.00	0.87
NOI/EqPart	0.28	0.43	0.59	0.68	0.26	0.18	0.52	0.91	0.87	1.00



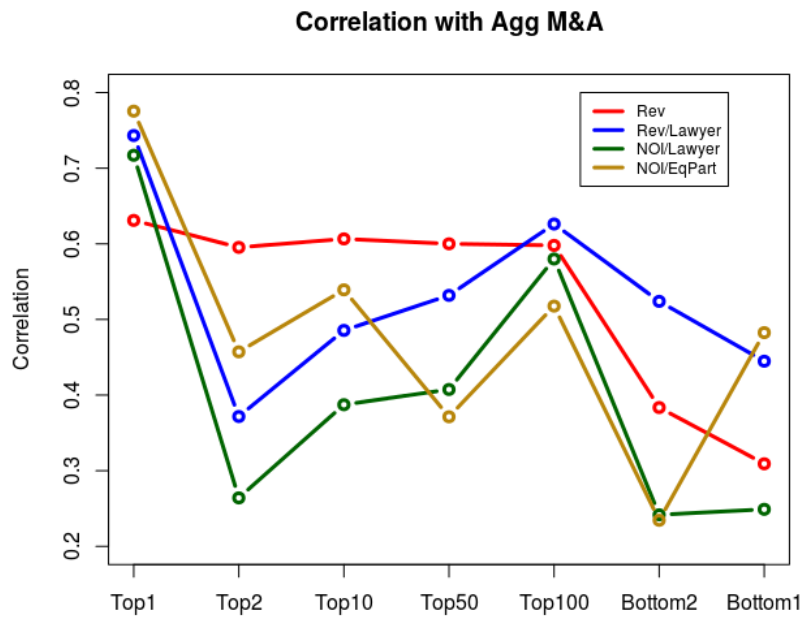
Correlations with Agg MA and GDP

Gross Revenue	Agg M&A	GDP
Top1	0.63	0.97
Top2	0.60	0.96
Top10	0.61	0.96
Top50	0.60	0.97
Top100	0.60	0.97
Bottom1	0.31	0.82
Bottom2	0.38	0.85

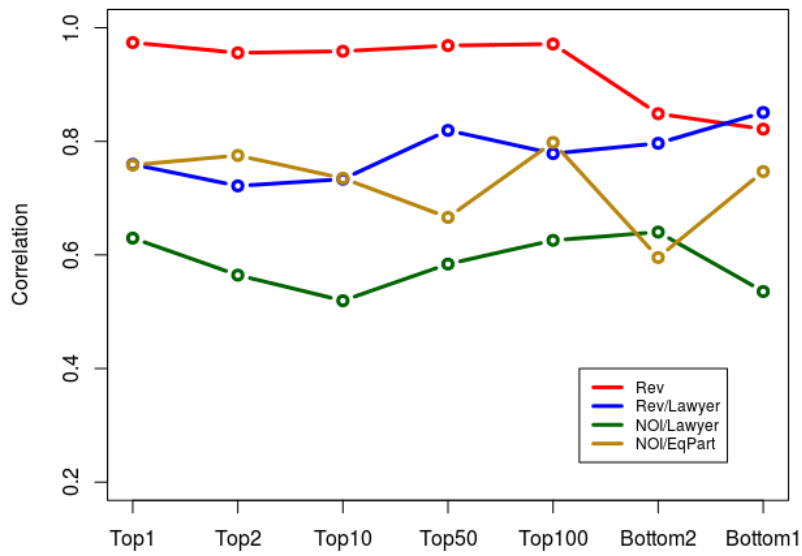
Revenue / Lawyer	Agg M&A	GDP
Top1	0.74	0.76
Top2	0.37	0.72
Top10	0.49	0.73
Top50	0.53	0.82
Top100	0.63	0.78
Bottom1	0.52	0.80
Bottom2	0.44	0.85

NOI / Lawyer	Agg M&A	GDP
Top1	0.72	0.63
Top2	0.26	0.56
Top10	0.39	0.52
Top50	0.41	0.58
Top100	0.58	0.63
Bottom1	0.25	0.54
Bottom2	0.24	0.64

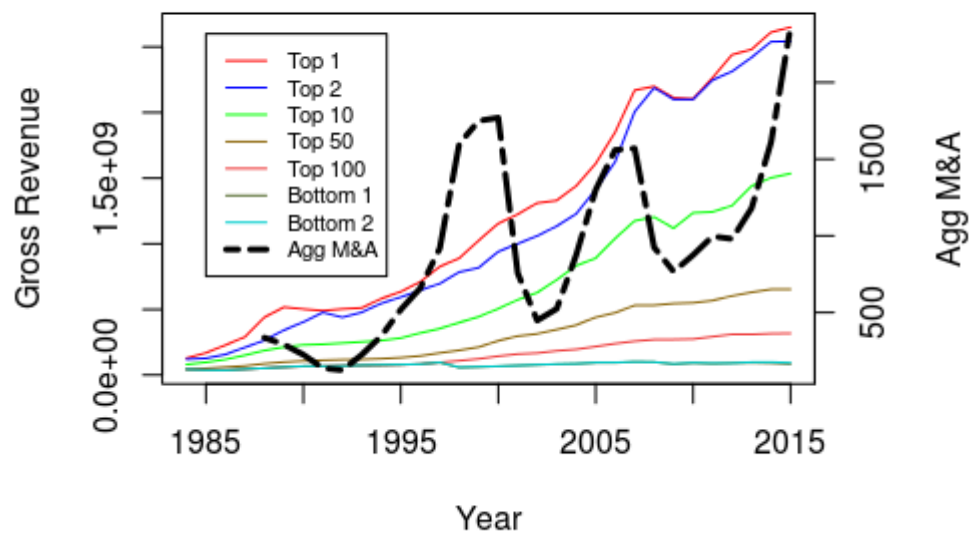
NOI / EqPart	Agg M&A	GDP
Top1	0.78	0.76
Top2	0.46	0.78
Top10	0.54	0.74
Top50	0.37	0.67
Top100	0.52	0.80
Bottom2	0.23	0.60
Bottom1	0.48	0.75



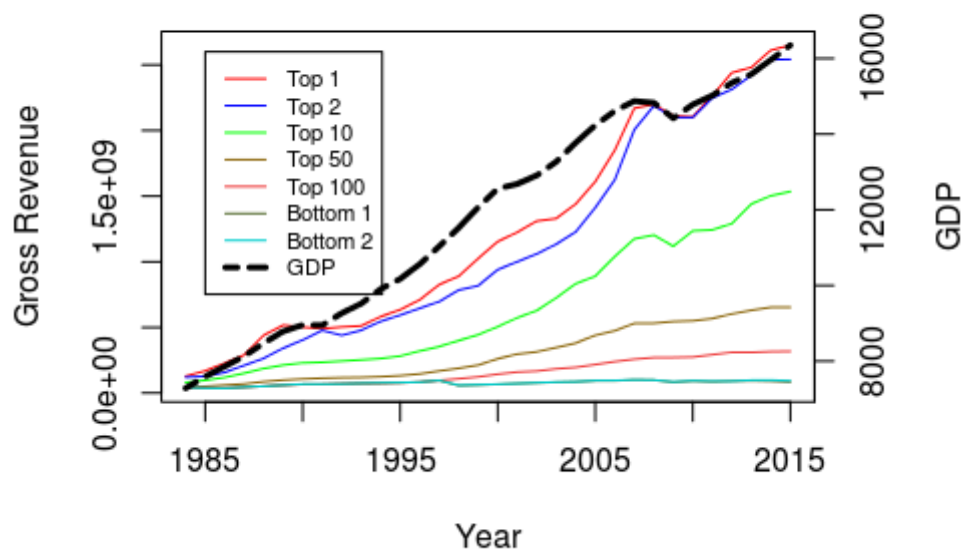
Correlation with GDP



Ranked Firms & Agg M&A



Ranked Firms & GDP



Model Selection

Gross Revenue/Lawyer

Performance	Gross Revenue/Lawyer w/Lawyers as covariate								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Adj R^2	0.76	0.76	0.91	0.73	0.32	0.31	0.58	0.28	0.08
AIC / 10e+2	1188	1188	1225	1278	1232	1232	1298	1323	1335
BIC / 10e+2	1205	1205	1244	1296	1232	1232	1300	1324	1335
CV / 10e+7	1759	1726	656	1965	4715	4656	3013	5075	6461

Performance	Gross Revenue/Lawyer without/Lawyers as covariate								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Adj R^2	0.70	0.70	0.91	0.65	0.31	0.31	0.57	0.27	
AIC / 10e+2	1197	1197	1227	1291	1232	1232	1299	1324	
BIC / 10e+2	1214	1214	1246	1308	1233	1232	1302	1324	
CV / 10e+7	2117	2127	675	2554	4765	4779	3078	5124	

NOI/lawyer

Performance	NOI/Lawyer w/Lawyers as covariate								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Adj R^2	0.77	0.77	0.85	0.74	0.26	0.26	0.41	0.24	0.02
AIC / 10e+2	1138	1138	1198	1223	1189	1189	1261	1273	1285
BIC / 10e+2	1156	1155	1217	1241	1189	1189	1264	1274	1285
CV / 10e+7	590	567	370	626	1828	1827	1400	1793	2292

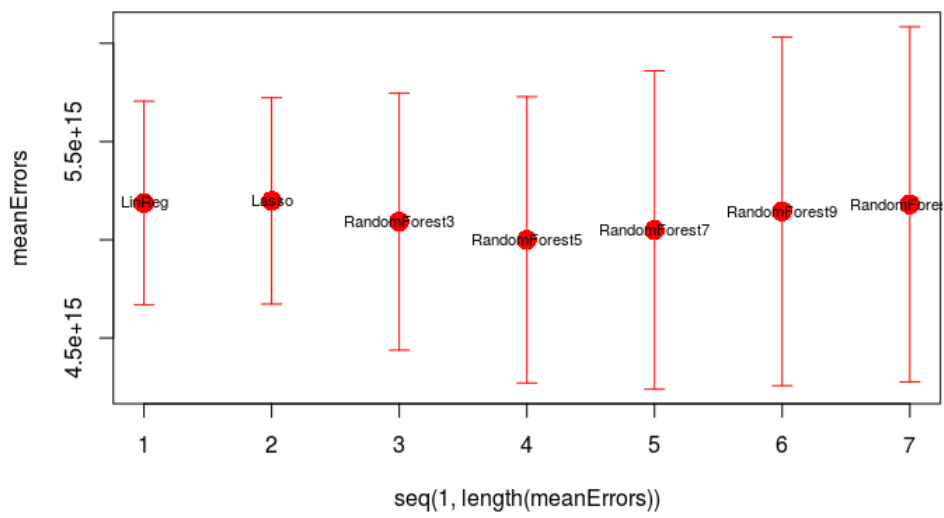
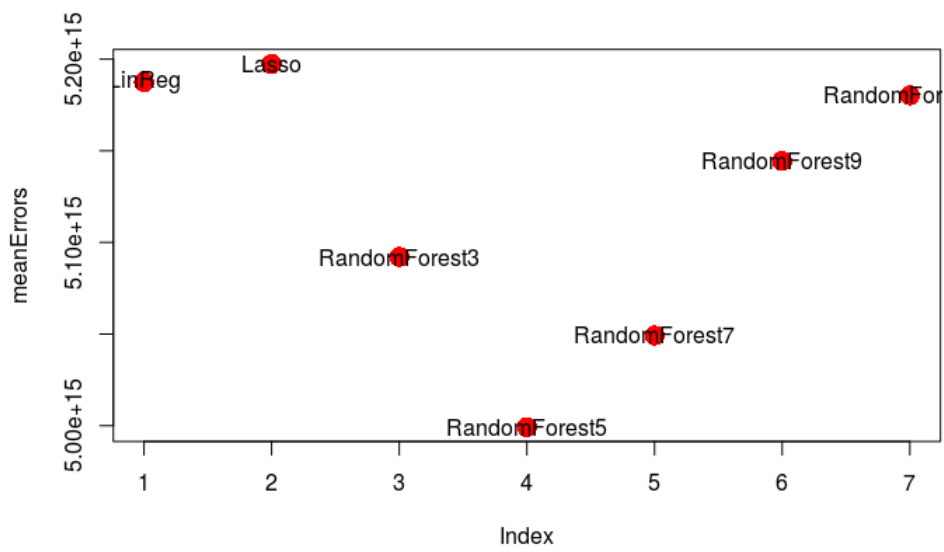
Performance	NOI/Lawyer without/Lawyers as covariate								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Adj R^2	0.74	0.74	0.85	0.69	0.25	0.25	0.40	0.24	
AIC / 10e+2	1144	1144	1198	1232	1189	1189	1262	1273	
BIC / 10e+2	1162	1161	1218	1249	1189	1189	1264	1274	
CV / 10e+7	652	663	374	742	1764	1691	1425	1800	

Gross Revenue, NOI and NOI/EqPart

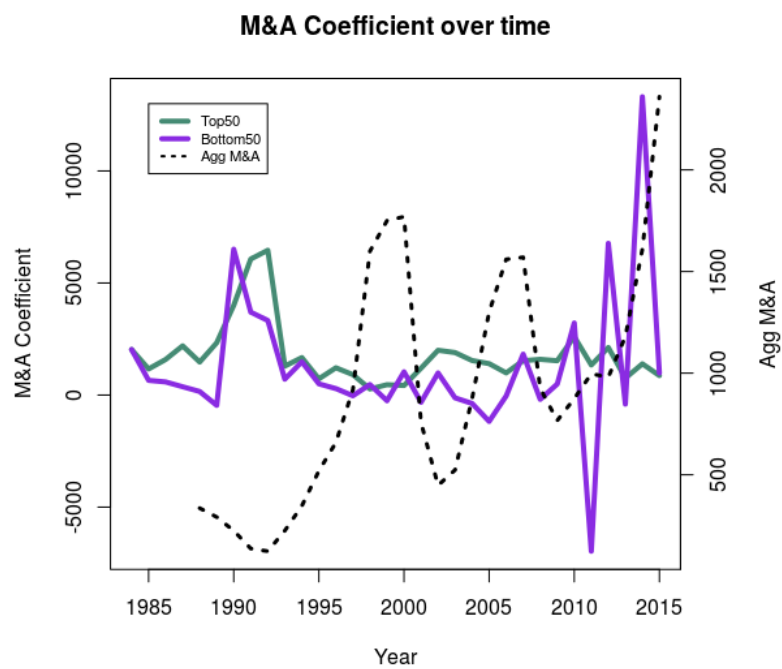
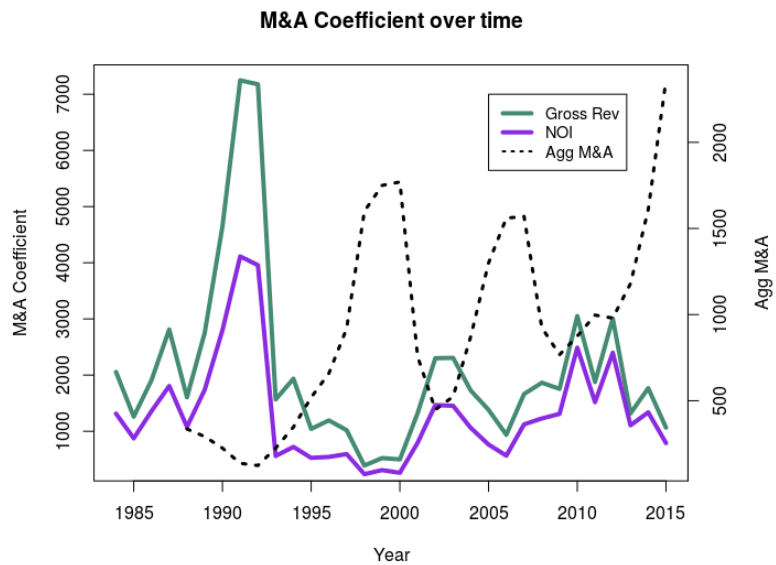
Performance	Gross Revenue								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Adj R^2	0.93	0.93	0.95	0.93	0.86	0.86	0.90	0.86	0.81
AIC / 10e+2	1771	1772	1883	1898	1800	1800	1913	1928	1942
BIC / 10e+2	1788	1789	1903	1916	1801	1801	1916	1928	1942
CV / 10e+13	739	738	566	763	1437	1456	1075	1451	1949

Performance	NOI								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Adj R^2	0.86	0.85	0.87	0.85	0.74	0.74	0.78	0.74	0.63
AIC / 10e+2	1727	1728	1841	1850	1752	1752	1866	1874	1890
BIC / 10e+2	1745	1745	1861	1868	1753	1753	1869	1875	1891
CV / 10e+13	283	286	235	281	499	502	402	478	662

Performance	NOI/EqPart								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Adj R^2	0.78	0.78	0.84	0.76	0.41	0.41	0.53	0.41	0.12
AIC / 10e+2	1263	1263	1336	1356	1306	1306	1387	1397	1416
BIC / 10e+2	1281	1281	1356	1373	1306	1306	1389	1398	1417
CV / 10e+7	9245	9353	6572	9798	24313	23594	18955	23701	35083



Over Time



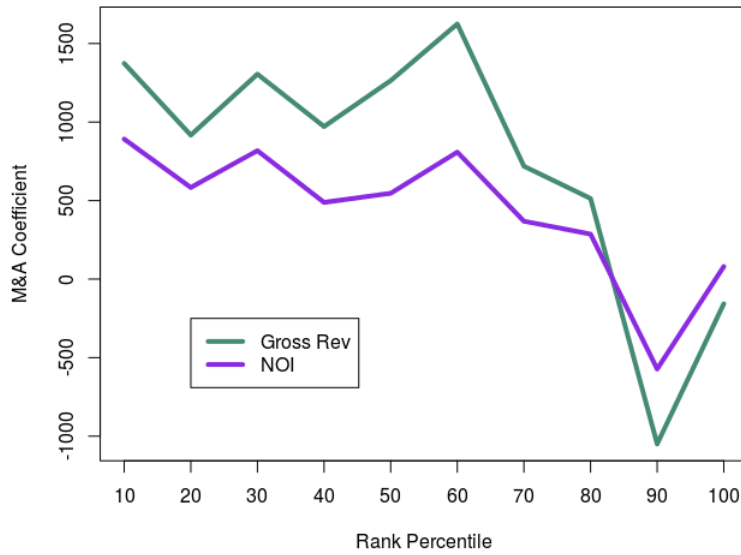
$\text{Correl}(\text{All Firms Coefficient}, \text{Agg M\&A}) = -0.5874556$

$\text{Correl}(\text{Top 50 Coefficient}, \text{Agg M\&A}) = -0.589117$

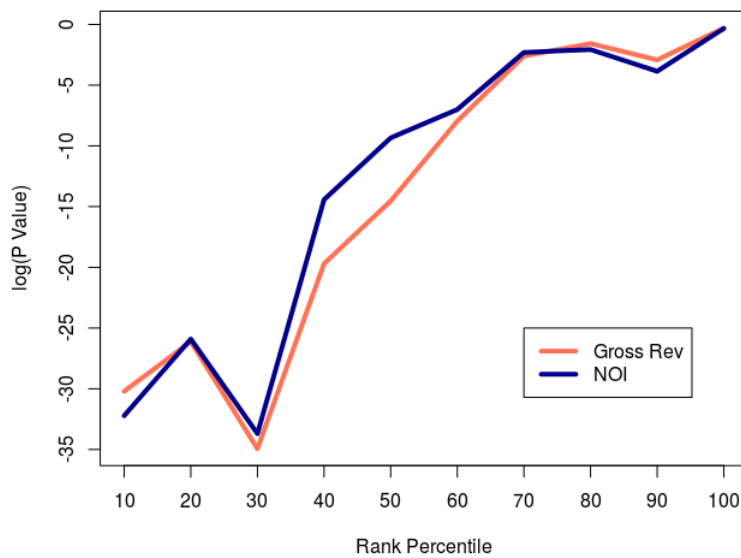
$\text{Correl}(\text{Bottom 50 Coefficient}, \text{Agg M\&A}) = 0.003172513$

Per Rank

M&A Coefficient per Rank Percentiles



M&A Coefficient's P Value per Rank Percentile



Regressions

Coefficients	Gross Revenue/Lawyer								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Lawyers * 10 ³	0.7** (6.5)	0.7** (6.6)	-0.03 (-0.5)	0.79** (7.3)	0.08** (3.2)	0.08** (3.2)	-0.04 (-1.8)	0.12** (4.9)	0.39** (18.5)
Lawyers2	-0.2** (-4.5)	-0.2** (-4.5)	0 (-1.4)	-0.2** (-5)	0** (-6.4)	0** (-6.4)	0* (-3.1)	0** (-8)	-0.1** (-14.7)
AggM&A	69.9** (12.3)	71.5** (11.8)			82.5** (9.3)	98** (17.6)			
AggD&E	0 (-1.6)				0 (0.9)				
AggIPO	0.1 ⁺ (2.1)				0.3 ⁺ (2.1)				
M&A	0.7* (3.1)	0.7* (3)	0.7** (3.3)	1.2** (4.2)	1.9** (10)	1.9** (10)	2.1** (12.3)	2.1** (11)	
D&E	0 (0.4)	0 (0.2)	0.1 (1.6)	0 (1)	0.1 ⁺ (2)	0.1 ⁺ (2.1)	0.1** (4.5)	0.1 ⁺ (2.4)	
IPO	0.3 (0.1)	0.6 (0.2)	2.5 (1.4)	2.8 (0.8)	6.5 (1.8)	7.1 ⁺ (2)	11.2** (3.6)	6.4 (1.7)	
Leverage * 10 ³	35.89** (3.3)	35.98** (3.3)	-10.29 ⁺ (-2)	41.85** (3.6)	30.86** (8.4)	30.8** (8.3)	9.7** (3.3)	38.96** (10.3)	
(Intercept) * 10 ³	139.33** (6.4)	138.32** (6.5)	-152.85** (-6.5)	192.96** (8.9)	350.66** (28.6)	363** (29.9)	256.38** (22.1)	406.45** (37.1)	436.47** (49)
Observations	4495	4495	4814	4814	4495	4495	4814	4814	4814
R2	0.77	0.77	0.92	0.75	0.32	0.32	0.58	0.28	0.08
Adj R2	0.76	0.76	0.91	0.73	0.32	0.31	0.58	0.28	0.08

** : p < 0.001

* : p < 0.01

⁺ : p < 0.05

Coefficients	Gross Revenue/Lawyer								Lawyers
	FirmFE				NoFirmFE				
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Lawyers * 10 ³									
Lawyers2									
AggM&A	78.2** (12.7)	91.8** (12.9)			81.5** (9.1)	97.4** (17.5)			
AggD&E	0 (0.8)				0 (1.1)				
AggIPO	0.3** (4.5)				0.3 ⁺ (2)				
M&A	1** (4.5)	1** (4.5)	0.7* (3.1)	1.6** (6.7)	1.9** (10.8)	1.9** (10.7)	1.9** (12.4)	2.1** (12)	
D&E	0.1 (0.9)	0.1 (1)	0.1 (1.7)	0.1 (1.8)	0.1 ⁺ (2.2)	0.1 ⁺ (2.3)	0.1** (4.1)	0.1* (2.8)	
IPO	2.7 (0.6)	3.5 (0.8)	2.5 (1.3)	8.2 (1.8)	7.5 ⁺ (2.1)	8.1 ⁺ (2.3)	10.5** (3.2)	8.1 ⁺ (2.2)	
Leverage * 10 ³	85.52** (7.2)	85.7** (7.1)	-15.5* (-3)	106.25** (8)	30.64** (8.7)	30.59** (8.6)	4.45 (1.6)	40.63** (11.1)	
(Intercept) * 10 ³	198.27** (10.8)	212.3** (12)	-133.05** (-6.7)	291.2** (14.7)	372.84** (36.3)	385.78** (38.5)	255.72** (23.8)	437.73** (48.5)	
Observations	4495	4495	4814	4814	4495	4495	4814	4814	
R2	0.72	0.72	0.91	0.67	0.31	0.31	0.57	0.27	
Adj R2	0.7	0.7	0.91	0.65	0.31	0.31	0.57	0.27	

** : p < 0.001

* : p < 0.01

⁺ : p < 0.05

Coefficients	NOI/Lawyer								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Lawyers * 10 ³	0.32** (6.1)	0.32** (6.2)	-0.01 (-0.2)	0.35** (6.8)	-0.01 (-0.8)	-0.01 (-0.8)	-0.06** (-4.3)	0 (0.2)	0.12** (9.3)
Lawyers2	-0.1** (-4.5)	-0.1** (-4.5)	0 (-0.8)	-0.1** (-5)	0 (-1.2)	0 (-1.2)	0 (1.4)	0 ⁺ (-2.3)	0** (-8.6)
AggM&A	33.5** (9.7)	33.5** (9.2)			34.1** (5.9)	38.9** (11.4)			
AggD&E	0 (-1.4)				0 (0)				
AggIPO	0 (1.2)				0.1 (1.2)				
M&A	0.5* (2.8)	0.5* (2.8)	0.5* (2.9)	0.7** (3.5)	1.3** (9.7)	1.3** (9.7)	1.4** (11)	1.4** (10.3)	
D&E	0 (1)	0 (0.9)	0 (1.6)	0 (1.3)	0 (1.8)	0 (1.9)	0.1** (3.8)	0 ⁺ (2.1)	
IPO	0.1 (0)	0.2 (0.1)	1.2 (0.8)	1.2 (0.6)	4.3 (1.6)	4.5 (1.6)	6.5 ⁺ (2.5)	4.3 (1.6)	
Leverage * 10 ³	-7.61 (-1.6)	-7.52 (-1.6)	-28.45** (-6.5)	-4.37 (-0.9)	-6.49** (-4.9)	-6.5** (-4.9)	-16.19** (-13)	-3.14 ⁺ (-2.3)	
(Intercept) * 10 ³	60.55** (5.3)	59.36** (5.3)	-66.12** (-3.6)	87.95** (8.6)	185.22** (24)	188.88** (24.8)	154.67** (19.2)	206.17** (31.2)	176.92** (31.2)
Observations	4495	4495	4814	4814	4495	4495	4814	4814	4814
R2	0.79	0.79	0.86	0.76	0.26	0.26	0.41	0.24	0.02
Adj R2	0.77	0.77	0.85	0.74	0.26	0.26	0.41	0.24	0.02

** : p < 0.001

* : p < 0.01

⁺ : p < 0.05

Coefficients	NOI/Lawyer								Lawyers
	FirmFE				NoFirmFE				
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Lawyers * 10 ³									
Lawyers2									
AggMnA	37.3** (10.2)	42.9** (11)			34** (5.9)	38.8** (11.3)			
AggEquity	0 (0.6)				0 (0.2)				
AggIPO	0.1** (3.4)				0.1 (1.1)				
M&A	0.6** (3.7)	0.6** (3.7)	0.5* (2.9)	0.9** (5.1)	1.3** (10.2)	1.3** (10.2)	1.3** (11.1)	1.4** (10.9)	
D&E	0.1 (1.2)	0.1 (1.3)	0 (1.6)	0.1 (1.8)	0 (1.6)	0 (1.7)	0.1* (2.8)	0 ⁺ (2)	
IPO	1.2 (0.4)	1.5 (0.6)	1.2 (0.8)	3.6 (1.4)	4.1 (1.5)	4.3 (1.5)	5.4 ⁺ (2)	4.3 (1.5)	
Leverage * 10 ³	15.74** (3.7)	15.81** (3.7)	-30.38** (-7.1)	24.47** (4.9)	-8.52** (-5.6)	-8.52** (-5.5)	-20.23** (-13.2)	-4.5* (-2.9)	
(Intercept) * 10 ³	86.84** (9.5)	92.53** (11.2)	-58.79** (-4)	130.79** (17.6)	183.26** (33.8)	187.07** (36.6)	146.22** (19.9)	208.14** (51.7)	
Observations	4495	4495	4814	4814	4495	4495	4814	4814	
R2	0.75	0.75	0.86	0.71	0.26	0.25	0.4	0.24	
Adj R2	0.74	0.74	0.85	0.69	0.25	0.25	0.4	0.24	

** : p < 0.001

* : p < 0.01

⁺ : p < 0.05

Coefficients	NOI/EqPart								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Lawyers * 10 ⁶	0** (5.9)	0** (5.9)	0 (1.3)	0** (6.4)	0** (3.5)	0** (3.5)	0 (0.3)	0** (4.4)	0** (19.5)
Lawyers2	-0.3** (-4.5)	-0.3** (-4.5)	-0.1 ⁺ (-2.2)	-0.3** (-5)	-0.1** (-6.1)	-0.1** (-6)	0** (-3.9)	-0.1** (-6.9)	-0.2** (-13.8)
AggM&A	126.9** (9.5)	115.4** (8.2)			129.3** (6)	132.2** (10.6)			
AggD&E	0** (-3.3)				0 (-1.8)				
AggIPO	0.1 (0.7)				0.4 (0.9)				
M&A	2.1** (4)	2.1** (4)	2.3** (4.5)	2.9** (4.9)	4.9** (12.1)	4.9** (12.1)	5.2** (14.2)	5.1** (12.7)	
D&E	0.2 (1.2)	0.2 (0.9)	0.3 (1.6)	0.2 (1.2)	0.3* (2.9)	0.3* (2.8)	0.4** (4.5)	0.3* (3)	
IPO	-3 (-0.3)	-2.9 (-0.3)	1.6 (0.2)	1 (0.1)	15.6 (1.9)	16.3 ⁺ (2)	23** (3.4)	15.3 (1.9)	
Leverage * 10 ⁶	0.1** (4.9)	0.1** (5)	0.1* (3.1)	0.2** (5.2)	0.2** (13.7)	0.2** (13.7)	0.1** (11.8)	0.2** (14.7)	
(Intercept) * 10 ⁶	-0.3** (-4.7)	-0.3** (-5.2)	-0.6** (-8.2)	-0.2** (-3.4)	0.1** (5.1)	0.1** (5)	0.1** (3.5)	0.2** (8.7)	0.4** (19.5)
Observations	4495	4495	4814	4814	4495	4495	4814	4814	4814
R2	0.8	0.79	0.85	0.78	0.41	0.41	0.53	0.41	0.12
Adj R2	0.78	0.78	0.84	0.76	0.41	0.41	0.53	0.41	0.12

** : p < 0.001

* : p < 0.01

⁺ : p < 0.05

Coefficients	Gross Revenue								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Lawyers * 10 ⁶	1.1** (11.6)	1.1** (11.7)	0.8** (9.9)	1.1** (13)	0.8** (45.1)	0.8** (45)	0.7** (47.7)	0.8** (45.1)	1** (48)
Lawyers2	-90.9** (-3.3)	-86.6** (-3.3)	-42.8+ (-2.4)	-86.4** (-4.1)	-61.9** (-10.7)	-61.7** (-10.6)	-49.6** (-9.3)	-60.5** (-10.4)	-89.7** (-13)
AggM&A	30744.9** (8.5)	20807** (5.6)			45379.4** (9.5)	41447.3** (13.9)			
AggD&E	-5** (-4.4)				-2.5** (-3.3)				
AggIPO	-74.6 (-1.9)				25.9 (0.3)				
M&A	826.6** (5.7)	815.4** (5.6)	869.4** (6)	961.8** (6.9)	1175** (11.8)	1175.7** (11.8)	1264.5** (14.3)	1264.5** (12.6)	
D&E	1.1 (0)	-22.9 (-0.4)	25.2 (0.4)	-9.1 (-0.1)	91.6** (3.5)	85.4** (3.4)	124.3** (5.2)	90.8** (3.6)	
IPO	1381.7 (0.4)	1104.2 (0.3)	2972.7 (1.1)	2085.3 (0.6)	7179* (2.9)	7262.4* (2.9)	9392.2** (4.2)	6924.3* (2.8)	
Leverage * 10 ⁶	4.7 (0.6)	5.5 (0.7)	-14.4 (-1.9)	7.3 (0.9)	12.1** (6.8)	12.2** (6.9)	2.1 (1.4)	14.9** (8.4)	
(Intercept) * 10 ⁶	-181.4** (-11)	-195.2** (-12.1)	-206.9** (-12.3)	-166.3** (-11.7)	-145.5** (-24)	-149.3** (-24.6)	-124.4** (-16.2)	-117.8** (-22.5)	-115.9** (-18.6)
Observations	4495	4495	4814	4814	4495	4495	4814	4814	4814
R2	0.94	0.94	0.95	0.93	0.87	0.86	0.9	0.86	0.81
Adj R2	0.93	0.93	0.95	0.93	0.86	0.86	0.9	0.86	0.81

** : p < 0.001

* : p < 0.01

+ : p < 0.05

Coefficients	NOI								
	FirmFE				NoFirmFE				Lawyers
	FE3	FE1	FEY	NoFE	FE3	FE1	FEY	NoFE	
Lawyers * 10 ⁶	0.5** (8)	0.5** (8)	0.4** (6.1)	0.5** (9.1)	0.3** (30.2)	0.3** (30.2)	0.3** (31)	0.3** (30.7)	0.4** (30.8)
Lawyers2	-52.4** (-3.3)	-50** (-3.3)	-28.6 ⁺ (-2.3)	-48.6** (-3.9)	-31.7** (-10.4)	-31.6** (-10.4)	-26.6** (-9.6)	-31.2** (-10.3)	-44.6** (-11.7)
AggM&A	14827.7** (6.4)	9447.8** (3.9)			18724.9** (6.2)	16064** (9.7)			
AggD&E	-2.7** (-3.5)				-1.5** (-3.3)				
AggIPO	-39.4 (-1.6)				5 (0.1)				
M&A	514.2** (5.4)	508** (5.3)	542.1** (5.8)	580.8** (6.5)	778.6** (12.4)	779.3** (12.4)	820.3** (14.3)	813.4** (12.9)	
D&E	28 (0.8)	14.9 (0.4)	36.8 (1)	19.2 (0.5)	37.7* (2.7)	34.1 ⁺ (2.5)	52.4** (3.9)	36* (2.6)	
IPO	695.7 (0.3)	547.2 (0.2)	1546.4 (0.8)	1084.9 (0.5)	4407* (2.9)	4436.6* (2.9)	5394.1** (3.8)	4296.4* (2.8)	
Leverage * 10 ⁶	-13.8* (-2.6)	-13.3 ⁺ (-2.5)	-23.1** (-4.1)	-12.3 ⁺ (-2.4)	-4.5** (-5.9)	-4.5** (-5.9)	-9** (-11.8)	-3.3** (-4.3)	
(Intercept) * 10 ⁶	-61.2** (-6.1)	-68.6** (-6.8)	-77.2** (-7)	-54.7** (-6.1)	-37.6** (-10.7)	-40.2** (-11.4)	-26.9** (-8.1)	-28.2** (-9.5)	-48.5** (-12.5)
Observations	4495	4495	4814	4814	4495	4495	4814	4814	4814
R2	0.86	0.86	0.88	0.86	0.74	0.74	0.78	0.74	0.63
Adj R2	0.86	0.85	0.87	0.85	0.74	0.74	0.78	0.74	0.63

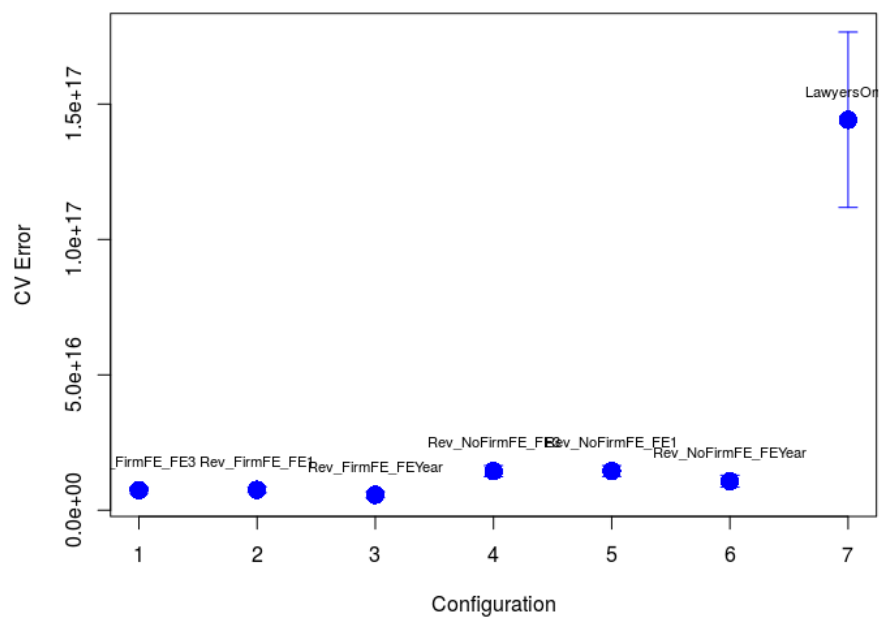
** : p < 0.001

* : p < 0.01

⁺ : p < 0.05

Model Performance Assessment

Cross Validation



Cross Validation

