Internet Appendix to
Common Ownership and Competition in Product Markets

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Abstract

This Internet Appendix presents additional results examining industry coordination and common ownership. Initial tables report additional analyses using our main sample of industries defined by NAICS codes. Subsequent tables replicate important analyses from the paper but using industries defined by three-digit SIC codes or the 300 fixed-classification industries from Hoberg and Phillips (2016) (H&P), respectively.

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IA.1. List of Exhibits

1. Table IA 1 reports changes in industry profitability around large quarterly increases in common institutional ownership.

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25. Table IA 25 reports summary statistics for H&P-defined industries.

IA.2.   Additional Results using NAICS-defined Industries

Table IA 1 reports event study results within certain subsamples. Given that the COC hypothesis is mostly concerned with sustained increases in common ownership, we limit the reported results to large increases identified as structural breaks.[1] Increases in common ownership in concentrated industries are not significantly associated with increased industry profitability. Also, industries without large privately-held, family-controlled, or dual class firms do not exhibit significant increases in profitability following increased common ownership. Even in industries in which firms have been prosecuted for collusion sometime during our sample period, increases in common ownership are not associated with increased profitability. For the subsample of industries where the CRSP/Compustat coverage of firms is the most complete, there are three of ten instances where increases in common ownership result in significant subsequent increases in industry profitability. Also, two out of ten tests reveal a significant increase in profitability following increased common ownership in the subsample free of changes in industry definitions over the entire sample period. Event study results reported elsewhere in this Internet Appendix using industries defined by three-digit SIC codes and H&P 300 fixed industry classifications are quite similar to those for NAICS and lead us to draw similar conclusions.

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[1]Results for decreases in common ownership and events identified on the basis of time series standard deviations are similar to those reported.

Table IA 1: Changes in Profitability around Large Changes in Common Ownership, Summary of Results

This table reports changes in profitability around large quarterly increases in common institutional ownership within various subsamples defined in the text. We identify positive structural breaks using a simple model in which common ownership is a function of a time varying level and an error term. Any industry level shift that is statistically significant at the 5% level is determined to be a significant change in common ownership. Changes in profitability are measured as the industry average over the four quarters subsequent to the change (quarter t=1 to t=4) minus to the industry average over the four quarters prior to the change (quarter t=-4 to t=-1). Variables are defined in Appendix A. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

Subsample	Profitability	C.O.	Pre	Post	Diff.	t-statistic	N
Concentrated=1	Markup	Density	1.104	1.099	-0.005	(-0.30)	25
	Markup	PCF	1.077	1.093	0.016	(1.45)	30
	Markup	PCS	1.075	1.076	0.001	(0.08)	33
	Markup	MHHI Delta	1.097	1.086	-0.012	(-0.68)	20
	Markup	C	1.062	1.054	-0.008	(-0.78)	24
	PCM	Density	0.339	0.333	-0.006	(-0.34)	25
	PCM	PCF	0.299	0.325	0.026	(1.35)	30
	PCM	PCS	0.300	0.294	-0.005	(-0.30)	33
	PCM	MHHI Delta	0.285	0.286	0.001	(0.07)	20
	PCM	C	0.255	0.252	-0.003	(-0.22)	24
Private, Family, or Dual=0	Markup	Density	1.240	1.248	0.008	(0.36)	21
	Markup	PCF	1.161	1.171	0.01	(0.53)	20
	Markup	PCS	1.149	1.168	0.019	(1.28)	24
	Markup	MHHI Delta	1.209	1.204	-0.005	(-0.18)	23
	Markup	C	1.077	1.079	0.002	(0.12)	17
	PCM	Density	0.403	0.412	0.009	(0.55)	21
	PCM	PCF	0.331	0.334	0.003	(0.15)	20
	PCM	PCS	0.326	0.338	0.013	(0.48)	24
	PCM	MHHI Delta	0.337	0.340	0.003	(0.17)	23
	PCM	C	0.261	0.280	0.018	(1.13)	17
Cartel=1	Markup	Density	1.061	1.070	0.008	(0.54)	18
	Markup	PCF	1.084	1.096	0.012	(1.00)	22
	Markup	PCS	1.075	1.087	0.012	(0.92)	26
	Markup	MHHI Delta	1.108	1.115	0.007	(0.74)	19
	Markup	C	1.041	1.047	0.006	(0.65)	16
	PCM	Density	0.290	0.273	-0.017	(-1.05)	18
	PCM	PCF	0.328	0.344	0.016	(0.79)	22
	PCM	PCS	0.274	0.282	0.007	(0.37)	26
	PCM	MHHI Delta	0.298	0.308	0.01	(1.17)	19
	PCM	C	0.299	0.290	-0.009	(-0.76)	16
Coverage=1	Markup	Density	1.079	1.072	-0.006	(-0.76)	37
	Markup	PCF	1.071	1.090	0.019	(1.70)*	23
	Markup	PCS	1.074	1.075	0.002	(0.24)	41
	Markup	MHHI Delta	1.054	1.072	0.019	(2.30)**	23
	Markup	C	1.052	1.043	-0.009	(-0.62)	16
	PCM	Density	0.337	0.325	-0.012	(-1.22)	37
	PCM	PCF	0.322	0.360	0.038	(1.78)*	23
	PCM	PCS	0.308	0.302	-0.005	(-0.44)	41
	PCM	MHHI Delta	0.316	0.322	0.006	(0.54)	23
	PCM	C	0.285	0.266	-0.018	(-1.04)	16
Balanced Panel=1	Markup	Density	1.126	1.133	0.007	(0.67)	63
	Markup	PCF	1.152	1.156	0.004	(0.54)	58
	Markup	PCS	1.119	1.133	0.014	(2.60)**	71
	Markup	MHHI Delta	1.170	1.173	0.003	(0.32)	60
	Markup	C	1.116	1.120	0.004	(0.40)	47
	PCM	Density	0.312	0.313	0.001	(0.05)	63
	PCM	PCF	0.328	0.339	0.011	(1.02)	58
	PCM	PCS	0.308	0.315	0.007	(0.78)	71
	PCM	MHHI Delta	0.309	0.324	0.015	(1.92)*	60
	PCM	C	0.278	0.275	-0.003	(-0.25)	47

Table IA 2: Changes in Capital Expenditures around Large Changes in Common Ownership using NAICS-defined Industries

This table reports changes in industry Net CAPX around large quarterly changes in common institutional ownership. We identify large changes in two ways. First, quarterly changes in industry common ownership of more than two standard deviations beyond the mean industry quarterly change are defined as significant. Second, we identify structural breaks using a simple model in which common ownership is a function of a time varying level and an error term. Any industry level shift that is statistically significant at the 5% level is determined to be a significant change in common ownership. Changes in operations are measured as the industry average over the four quarters subsequent to the change (quarter t=1 to t=4) minus to the industry average over the four quarters prior to the change (quarter t=-4 to t=-1). Variables are defined in Appendix A. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

Inc./Dec.	2SD/SB	Outcome Variable	C.O.	Pre	Post	Diff.	t-statistic	N
Increase	2SD	Net CAPX	Density	0.003	0.003	0.000	(0.16)	649
Increase	2SD	Net CAPX	PCF	0.005	0.005	0.000	(-0.03)	583
Increase	2SD	Net CAPX	PCS	0.003	0.003	0.000	(-0.2)	715
Increase	2SD	Net CAPX	MHHI Delta	0.004	0.004	0.000	(0.31)	619
Increase	2SD	Net CAPX	C	0.004	0.004	-0.001	(-1.69)*	586
Increase	SB	Net CAPX	Density	0.004	0.003	-0.001	(-1.01)	102
Increase	SB	Net CAPX	PCF	0.005	0.005	0.000	(0.63)	97
Increase	SB	Net CAPX	PCS	0.003	0.003	0.000	(-0.45)	119
Increase	SB	Net CAPX	MHHI Delta	0.004	0.004	0.001	(0.81)	89
Increase	SB	Net CAPX	C	0.006	0.004	-0.002	(-2.16)**	77
Decrease	2SD	Net CAPX	Density	0.003	0.003	0.000	(-0.06)	549
Decrease	2SD	Net CAPX	PCF	0.005	0.004	-0.001	(-2.25)**	621
Decrease	2SD	Net CAPX	PCS	0.004	0.003	0.000	(-0.64)	604
Decrease	2SD	Net CAPX	MHHI Delta	0.004	0.004	0.000	(-0.47)	636
Decrease	2SD	Net CAPX	C	0.004	0.004	0.000	(-0.35)	577
Decrease	SB	Net CAPX	Density	-0.001	0.001	0.002	(3.04)***	78
Decrease	SB	Net CAPX	PCF	0.004	0.003	-0.001	(-1.28)	76
Decrease	SB	Net CAPX	PCS	0.000	0.001	0.001	(1.36)	84
Decrease	SB	Net CAPX	MHHI Delta	0.003	0.003	-0.001	(-1.48)	81
Decrease	SB	Net CAPX	C	0.003	0.005	0.002	(2.82)***	69

Table IA 3:   Changes in Advertising around Large Changes in Common Ownership using NAICS-defined Industries

This table reports changes in industry Advertising around large quarterly changes in common institutional ownership. We identify large changes in two ways. First, quarterly changes in industry common ownership of more than two standard deviations beyond the mean industry quarterly change are defined as significant. Second, we identify structural breaks using a simple model in which common ownership is a function of a time varying level and an error term. Any industry level shift that is statistically significant at the 5% level is determined to be a significant change in common ownership. Changes in operations are measured as the industry average over the four quarters subsequent to the change (quarter t=1 to t=4) minus to the industry average over the four quarters prior to the change (quarter t=-4 to t=-1). Variables are defined in Appendix A. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

Inc/Dec	2SD/SB	Outcome Variable	C.O.	Pre	Post	Dif	t-statistic	N
Increase	2SD	Advertising	Density	0.029	0.028	-0.001	(-2.24)**	505
Increase	2SD	Advertising	PCF	0.037	0.035	-0.001	(-1.63)	426
Increase	2SD	Advertising	PCS	0.031	0.030	-0.001	(-1.65)	537
Increase	2SD	Advertising	MHHI delta	0.033	0.033	0.000	(0.66)	450
Increase	2SD	Advertising	C	0.034	0.033	-0.001	(-1.38)	417
Increase	SB	Advertising	Density	0.026	0.023	-0.003	(-1.31)	78
Increase	SB	Advertising	PCF	0.038	0.037	-0.001	(-0.56)	83
Increase	SB	Advertising	PCS	0.033	0.030	-0.003	(-1.53)	101
Increase	SB	Advertising	MHHI delta	0.036	0.037	0.001	(0.60)	67
Increase	SB	Advertising	C	0.034	0.032	-0.002	(-0.87)	58
Decrease	2SD	Advertising	Density	0.029	0.028	-0.001	(-1.51)	417
Decrease	2SD	Advertising	PCF	0.034	0.033	-0.001	(-0.82)	450
Decrease	2SD	Advertising	PCS	0.032	0.031	-0.001	(-1.14)	430
Decrease	2SD	Advertising	MHHI delta	0.031	0.031	0.000	(0.35)	466
Decrease	2SD	Advertising	C	0.033	0.032	-0.001	(-1.23)	406
Decrease	SB	Advertising	Density	0.025	0.021	-0.004	(-1.27)	54
Decrease	SB	Advertising	PCF	0.032	0.032	0.000	(0.00)	48
Decrease	SB	Advertising	PCS	0.026	0.027	0.001	(0.48)	53
Decrease	SB	Advertising	MHHI delta	0.027	0.027	0.000	(0.14)	59
Decrease	SB	Advertising	C	0.032	0.033	0.001	(0.39)	47

Table IA 4: Changes in Cost of Goods Sold around Large Changes in Common Ownership using NAICS-defined Industries

This table reports changes in industry total cost of goods sold over total industry sales around large quarterly changes in common institutional ownership. We identify large changes in two ways. First, quarterly changes in industry common ownership of more than two standard deviations beyond the mean industry quarterly change are defined as significant. Second, we identify structural breaks using a simple model in which common ownership is a function of a time varying level and an error term. Any industry level shift that is statistically significant at the 5% level is determined to be a significant change in common ownership. Changes in operations are measured as the industry average over the four quarters subsequent to the change (quarter t=1 to t=4) minus to the industry average over the four quarters prior to the change (quarter t=-4 to t=-1). Variables are defined in Appendix A. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

Inc./Dec.	2SD/SB	Outcome Variable	C.O.	Pre	Post	Diff.	t-statistic	N
Increase	2SD	COGS	Density	0.692	0.694	0.002	(0.98)	651
Increase	2SD	COGS	PCF	0.718	0.718	0.000	(-0.16)	586
Increase	2SD	COGS	PCS	0.696	0.697	0.001	(0.27)	722
Increase	2SD	COGS	MHHI Delta	0.718	0.712	-0.006	(-2.06)**	619
Increase	2SD	COGS	C	0.721	0.720	-0.001	(-0.29)	587
Increase	SB	COGS	Density	0.686	0.688	0.002	(0.30)	102
Increase	SB	COGS	PCF	0.686	0.688	0.002	(0.26)	98
Increase	SB	COGS	PCS	0.709	0.705	-0.003	(-0.51)	118
Increase	SB	COGS	MHHI Delta	0.701	0.689	-0.012	(-2.14)**	90
Increase	SB	COGS	C	0.723	0.736	0.013	(1.73)*	77
Decrease	2SD	COGS	Density	0.696	0.696	-0.001	(-0.18)	552
Decrease	2SD	COGS	PCF	0.711	0.712	0.000	(0.08)	624
Decrease	2SD	COGS	PCS	0.699	0.698	-0.002	(-0.56)	611
Decrease	2SD	COGS	MHHI Delta	0.710	0.711	0.001	(0.24)	637
Decrease	2SD	COGS	C	0.717	0.717	0.001	(0.15)	579
Decrease	SB	COGS	Density	0.704	0.688	-0.016	(-2.17)**	79
Decrease	SB	COGS	PCF	0.703	0.708	0.004	(0.40)	77
Decrease	SB	COGS	PCS	0.723	0.719	-0.003	(-0.31)	83
Decrease	SB	COGS	MHHI Delta	0.715	0.722	0.006	(0.87)	80
Decrease	SB	COGS	C	0.706	0.715	0.009	(0.75)	69

Table IA 5: Alternative Specifications of Panel Regressions of Industry Profitability on Institutional Common Ownership, Summary of Results

This table reports the results of OLS regressions explaining industry-level profitability with common ownership and various selections of controls. We report the coefficent, t-statistic, and variance inflation factor for the measure of common ownership from 40 regressions, eight for each of the five measures of common ownership. The dependent variable is Markup. The additional independent variables are summarized at the top of each column. Standard errors are robust to heteroscedasticity and clustered at the industry level. Variables are defined in Appendix A. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

	Intercept	Time Trend +Intercept	Time FE	Industry FE	Time and Ind. FE	Azar (2011) & Nain and Wang (2018) Controls +intercept	Azar (2011) & Nain and Wang (2018) Controls Time and Ind. FE	Azar (2011) & Nain and Wang (2018) Controls + q, IO, Top5 + Time and Ind. FE
Density	-0.040	-0.068*	-0.074**	0.023**	0.003	0.038**	-0.004	-0.008
t-statistic	(-1.210)	(-1.746)	(-2.023)	(2.364)	(0.325)	(2.082)	(-0.400)	(-0.831)
VIF		1.56	1.69	1.77	2.19	1.96	2.55	2.64
R^2	0.001	0.003	0.008	0.798	0.803	0.281	0.808	0.811
Pcf	0.096	0.083	0.094	0.010	0.001	0.071	-0.001	-0.002
t-statistic	(1.266)	(1.093)	(1.184)	(0.491)	(0.039)	(1.300)	(-0.054)	(-0.080)
VIF		2.51	2.46	4.05	4.48	4.62	5.83	5.84
R^2	0.003	0.004	0.009	0.798	0.803	0.282	0.808	0.811
Pcs	-0.084	-0.107*	-0.123*	0.043***	0.030***	0.043	0.023*	0.019
t-statistic	(-1.549)	(-1.723)	(-1.856)	(3.734)	(2.642)	(1.584)	(1.829)	(1.506)
VIF		3.90	4.43	5.77	7.74	9.21	12.01	12.23
R^2	0.004	0.008	0.013	0.798	0.803	0.281	0.808	0.811
MHHI Delta	0.000	0.000	0.000	0.000**	0.000*	-0.000	0.000	0.000
t-statistic	(1.062)	(0.812)	(0.924)	(2.593)	(1.959)	(-0.382)	(1.115)	(0.481)
VIF		3.25	3.17	5.66	6.93	5.03	8.05	8.15
R^2	0.003	0.003	0.009	0.798	0.803	0.281	0.808	0.811
C	-0.046	-0.071	-0.069	0.012	-0.002	0.004	-0.006	-0.020
t-statistic	(-0.540)	(-0.806)	(-0.760)	(0.568)	(-0.083)	(0.068)	(-0.289)	(-0.976)
VIF		3.59	3.78	4.49	5.12	3.64	5.27	5.38
R^2	0.000	0.003	0.007	0.798	0.803	0.281	0.808	0.811

Table IA 6: Panel Regressions of Industry Profitability on Institutional Common Ownership Using Alternative Characterizations of Profitability and Common Ownership, Summary of Results

This table reports the results of multivariate OLS regressions explaining alternative characterizations of industry-level profitability and common ownership. The specification is the same as column 5 from Table ??; however, each column reports results using alternative characterizations of industry profitability as the dependent variable or common ownership as the independent variable of interest. The dependent variable in column 1 is the within-industry standard deviation of profitability. Column 2 uses the difference between the 90th and 10th percentiles of profitability, and column 3 uses the market-share-weighted average industry profitability. Columns 4-6 use indicator variables set to one if common ownership is in the top half, top quartile, and top decile, respectively. All specifications include industry and quarter fixed effects. Standard errors are robust to heteroscedasticity and clustered at the industry level. Variables are defined in Appendix A. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

| | | Alternative LHS | | | Alternative RHS | | |
| | | Std. Dev. | p90-p10 | Weighted Avg. | C.O Above Median | C.O. Top Quartile | C.O. Top Decile |
Profitability	C.O.						
				Coefficient			
Markup	Density	-0.018	-0.026	-0.011	0.014***	0.012***	-0.007
	PCF	0.036*	0.071*	-0.016	0.004	0.000	-0.005
	PCS	0.001	-0.008	0.008	0.014***	0.002	-0.010*
	MHHI Delta	-0.000	-0.000	0.000	0.001	0.006	0.011**
	C	-0.050**	-0.127***	-0.039	0.005	0.001	-0.002
PCM	Density	-0.026	-0.035	-0.001	0.006	0.009*	-0.007
	PCF	0.022	0.037	0.013	0.005	-0.002	-0.004
	PCS	-0.041**	-0.061	-0.018	0.002	-0.000	-0.013
	MHHI Delta	-0.000	-0.000	-0.000	-0.002	0.003	-0.001
	C	-0.054**	-0.106**	-0.034	-0.003	-0.005	-0.009
				t-statistic			
Markup	Density	(-1.559)	(-1.029)	(-0.769)	(2.813)	(3.112)	(-1.616)
	PCF	(1.858)	(1.717)	(-0.415)	(1.439)	(0.045)	(-0.453)
	PCS	(0.059)	(-0.256)	(0.332)	(4.417)	(0.518)	(-1.858)
	MHHI Delta	(-0.431)	(-0.489)	(0.979)	(0.219)	(1.418)	(2.051)
	C	(-2.544)	(-2.755)	(-1.315)	(1.465)	(0.253)	(-0.390)
PCM	Density	(-1.583)	(-1.079)	(-0.042)	(1.475)	(1.773)	(-1.034)
	PCF	(0.923)	(0.654)	(0.790)	(1.590)	(-0.512)	(-0.497)
	PCS	(-2.089)	(-1.422)	(-1.053)	(0.457)	(-0.057)	(-1.607)
	MHHI Delta	(-1.505)	(-1.289)	(-1.198)	(-0.488)	(0.859)	(-0.124)
	C	(-2.271)	(-2.253)	(-1.290)	(-0.931)	(-1.280)	(-1.466)
				N			
Markup	Density	24,351	24,388	24,388	24,388	24,388	24,388
	PCF	24,351	24,388	24,388	24,388	24,388	24,388
	PCS	24,351	24,388	24,388	24,388	24,388	24,388
	MHHI Delta	24,351	24,388	24,388	24,388	24,388	24,388
	C	24,351	24,388	24,388	24,388	24,388	24,388
PCM	Density	23,983	24,377	24,377	24,377	24,377	24,377
	PCF	23,983	24,377	24,377	24,377	24,377	24,377
	PCS	23,983	24,377	24,377	24,377	24,377	24,377
	MHHI Delta	23,983	24,377	24,377	24,377	24,377	24,377
	C	23,983	24,377	24,377	24,377	24,377	24,377

Table IA 7: Panel Regressions of Industry Profitability on Institutional Common Ownership, Complementary Subsamples

This table reports the results of multivariate OLS regressions explaining industry-level profitability with common ownership and controls for other aspects of institutional ownership and for differences in industry structure. The subsamples are the complementary subsamples of those examined in Table **??**. The specification is the same as column 5 from Table **??**. All specifications include industry and quarter fixed effects. Standard errors are robust to heteroscedasticity and clustered at the industry level. Variables are defined in Appendix A. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

				Subsample			
Profitability	C.O.	Full	Concen-trated=0	Private, Family, Dual=1	Cartel=0	Cover-age=0	Balanced Panel=0
				Coefficient			
Markup	Density	-0.004	-0.003	-0.015	0.002	0.008	-0.004
	PCF	-0.001	-0.000	-0.019	0.005	0.017	-0.037
	PCS	0.023*	0.035**	0.017	0.029**	0.039**	0.029
	MHHI Delta	0.000	0.000*	0.000*	0.000	0.000	0.000
	C	-0.006	0.008	0.018	-0.017	-0.023	-0.014
PCM	Density	-0.003	-0.021	-0.015	-0.001	-0.008	-0.008
	PCF	0.010	0.009	-0.011	0.022	0.013	0.017
	PCS	-0.001	-0.007	-0.016	-0.003	-0.007	-0.012
	MHHI Delta	-0.000	0.000	0.000	-0.000	-0.000	-0.000
	C	-0.030	-0.027	-0.016	-0.035	-0.067**	-0.038
				t-statistic			
Markup	Density	(-0.403)	(-0.185)	(-1.245)	(0.150)	(0.563)	(-0.339)
	PCF	(-0.055)	(-0.011)	(-0.870)	(0.187)	(0.683)	(-1.178)
	PCS	(1.839)	(2.076)	(1.118)	(1.995)	(2.361)	(1.612)
	MHHI Delta	(1.121)	(1.709)	(1.742)	(0.871)	(0.224)	(0.439)
	C	(-0.291)	(0.273)	(0.890)	(-0.698)	(-0.864)	(-0.511)
PCM	Density	(-0.184)	(-0.984)	(-0.859)	(-0.052)	(-0.490)	(-0.366)
	PCF	(0.505)	(0.387)	(-0.566)	(1.116)	(0.638)	(0.637)
	PCS	(-0.067)	(-0.340)	(-0.816)	(-0.136)	(-0.330)	(-0.465)
	MHHI Delta	(-0.438)	(0.838)	(0.317)	(-0.128)	(-0.776)	(-1.413)
	C	(-1.182)	(-1.008)	(-0.642)	(-1.219)	(-2.514)	(-1.007)
				N			
Markup	Density	24,388	17,502	18,557	19,083	16,501	10,633
	PCF	24,388	17,502	18,557	19,083	16,501	10,633
	PCS	24,388	17,502	18,557	19,083	16,501	10,633
	MHHI Delta	24,388	17,502	18,557	19,083	16,501	10,633
	C	24,388	17,502	18,557	19,083	16,501	10,633
PCM	Density	24,377	17,502	18,553	19,075	16,494	10,624
	PCF	24,377	17,502	18,553	19,075	16,494	10,624
	PCS	24,377	17,502	18,553	19,075	16,494	10,624
	MHHI Delta	24,377	17,502	18,553	19,075	16,494	10,624
	C	24,377	17,502	18,553	19,075	16,494	10,624

Table IA 8: Difference-in-Difference Regressions of Industries' PCMs on Institutional Common Ownership: Alternative Treatment Definitions

This table presents results of difference-in-difference regressions. The sample includes 12 quarters prior to each of the 48 institutional merger announcements and 12 quarters after each merger is completed. The periods between announcement and completion are not included. In the first four columns, Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is above the 90th percentile, zero otherwise. Columns 5 through 8 identify treated industries as those with implied changes above the 95th percentile. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

| | 90th | | | | 95th | | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\text{Treat}_{\text{MHHI Delta}}*\text{Post}$	-0.001	0.001			0.001	0.003		
	(-0.150)	(0.504)			(0.256)	(0.984)		
$\text{Treat}_{\text{MHHI Delta}}$	0.003				-0.008			
	(0.456)				(-0.969)			
$\text{Treat}_C*\text{Post}$			-0.002	0.001			0.002	0.002
			(-0.533)	(0.326)			(0.425)	(0.539)
Treat_C			-0.001				-0.014*	
			(-0.177)				(-1.879)	
Off Degree (x 1,000)		-1.743***		-1.745***		-1.745***		-1.743***
		(-2.703)		(-2.706)		(-2.705)		(-2.703)
ln(Assets)		0.015**		0.015**		0.015**		0.015**
		(2.222)		(2.220)		(2.222)		(2.221)
1 / No. Firms		0.175**		0.174**		0.175**		0.175**
		(2.302)		(2.296)		(2.302)		(2.301)
HHI		-0.075**		-0.074**		-0.075**		-0.075**
		(-2.486)		(-2.485)		(-2.486)		(-2.486)
Firms with Blocks		0.010		0.010		0.010		0.010
		(0.725)		(0.726)		(0.726)		(0.725)
Capital Intensity		-0.001		-0.001		-0.001		-0.001
		(-0.322)		(-0.322)		(-0.323)		(-0.322)
Sales Growth		0.000**		0.000**		0.000**		0.000**
		(2.349)		(2.351)		(2.348)		(2.349)
R&D Intensity		0.102		0.104		0.102		0.102
		(0.191)		(0.193)		(0.190)		(0.191)
R&D Missing		-0.003		-0.003		-0.003		-0.003
		(-0.569)		(-0.568)		(-0.570)		(-0.569)
Leverage		-0.036		-0.036		-0.036		-0.036
		(-1.180)		(-1.182)		(-1.182)		(-1.181)
Quarter Effects	Y	Y	Y	Y	Y	Y	Y	Y
Industry Effects		Y		Y		Y		Y
Observations	184,036	183,846	184,036	183,846	184,036	183,846	184,036	183,846
R^2	0.012	0.028	0.012	0.028	0.012	0.028	0.012	0.028
Industries	269	269	269	269	269	269	269	269

Table IA 9: Panel Regressions of Advertising and Net Capital Expenditures on Institutional Common Ownership, Summary of Results

This table reports the results of multivariate OLS regressions explaining industry-level Advertising and Net CAPX with common ownership and controls for other aspects of institutional ownership and for differences in industry structure. The specification is similar to column 5 from Table ?? but with different dependent variables. All specifications include industry and quarter fixed effects. Standard errors are robust to heteroscedasticity and clustered at the industry level. Variables are defined in Appendix A. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

| | | | | Subsample | | | |
| | | | | | | | |
Expenditure	C.O.	Full	Concen-trated=1	Private, Family, Dual=0	Cartel=1	Cover-age=1	Balanced Panel=1
				Coefficient			
Net CAPX	Density	-0.002*	-0.000	0.002	-0.001	-0.003	-0.003
	PCF	-0.000	0.001	0.001	0.001	0.002	0.000
	PCS	-0.002	-0.002	0.001	0.001	-0.003	-0.002
	MHHI Delta	0.000	0.000	0.000	0.000	0.000*	-0.000
	C	-0.001	0.004	-0.002	-0.003	0.001	-0.005**
Advertising	Density	0.001	-0.005	-0.001	-0.012	-0.004	0.008
	PCF	-0.002	-0.017**	-0.002	-0.009	-0.001	0.000
	PCS	-0.002	-0.009	-0.003	-0.013	-0.001	0.002
	MHHI Delta	-0.000	-0.000	-0.000	-0.000	-0.000	0.000
	C	0.001	-0.006	0.025**	-0.006	-0.006	0.002
				t-statistic			
Net CAPX	Density	(-1.694)	(-0.258)	(1.309)	(-1.012)	(-1.596)	(-1.140)
	PCF	(-0.033)	(0.365)	(0.481)	(0.811)	(0.462)	(0.275)
	PCS	(-1.549)	(-0.793)	(0.297)	(0.620)	(-1.473)	(-1.109)
	MHHI Delta	(0.378)	(1.509)	(1.457)	(0.405)	(1.805)	(-0.863)
	C	(-0.479)	(1.035)	(-0.773)	(-0.985)	(0.188)	(-2.084)
Advertising	Density	(0.370)	(-0.895)	(-0.152)	(-1.323)	(-0.831)	(1.380)
	PCF	(-0.661)	(-2.415)	(-0.277)	(-1.052)	(-0.211)	(0.043)
	PCS	(-0.463)	(-1.249)	(-0.254)	(-1.316)	(-0.256)	(0.316)
	MHHI Delta	(-0.336)	(-0.317)	(-0.266)	(-1.370)	(-0.222)	(0.832)
	C	(0.262)	(-0.677)	(1.997)	(-0.592)	(-0.927)	(0.210)
				N			
Net CAPX	Density	24,321	6,862	5,817	5,295	7,878	13,709
	PCF	24,321	6,862	5,817	5,295	7,878	13,709
	PCS	24,321	6,862	5,817	5,295	7,878	13,709
	MHHI Delta	24,321	6,862	5,817	5,295	7,878	13,709
	C	24,321	6,862	5,817	5,295	7,878	13,709
Advertising	Density	19,732	4,595	3,881	4,712	6,297	11,733
	PCF	19,732	4,595	3,881	4,712	6,297	11,733
	PCS	19,732	4,595	3,881	4,712	6,297	11,733
	MHHI Delta	19,732	4,595	3,881	4,712	6,297	11,733
	C	19,732	4,595	3,881	4,712	6,297	11,733

Table IA 10:   Difference-in-Difference Regressions of Industry Capital Expenditures and Advertising on Institutional Common Ownership, Summary of Results

This table summarizes the coefficient of interest from difference-in-difference regressions for the full sample and various subsamples. The specifications correspond to those in columns 5 and 10 from Table **??**, however the dependent variable is either Net CAPX or Advertising. The sample includes 12 quarters prior to each of the 48 merger announcements and 12 quarters after each merger is completed. The periods between announcement and completion are not included. Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is positive for that industry, zero otherwise. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

Dependent Variable	C.O.	Full	Subsample				
			Concen-trated=1	Private, Family, Dual=0	Cartel=1	Cover-age=1	Balanced Panel=1
			Coefficient				
Net CAPX	MHHI Delta	-0.000	-0.000	0.000	-0.000*	-0.000	-0.000
	C	-0.000**	-0.001**	-0.000	0.000	-0.000**	-0.000
Advertising	MHHI Delta	-0.001*	-0.002	-0.001	-0.001**	-0.000	0.000
	C	0.001**	0.002***	0.002**	0.000	0.000	-0.000
			t-statistic				
Net CAPX	MHHI Delta	(-0.011)	(-0.727)	(0.814)	(-1.908)	(-0.707)	(-0.473)
	C	(-2.348)	(-2.254)	(-0.341)	(1.052)	(-2.055)	(-1.309)
Advertising	MHHI Delta	(-1.672)	(-0.843)	(-0.529)	(-2.330)	(-0.024)	(0.716)
	C	(2.042)	(2.693)	(2.369)	(1.506)	(0.395)	(-0.448)
			N				
Net CAPX	MHHI Delta	183,360	52,894	45,410	39,129	56,648	102,273
	C	183,360	52,894	45,410	39,129	56,648	102,273
Advertising	MHHI Delta	144,847	33,493	28,390	34,380	44,107	86,382
	C	144,847	33,493	28,390	34,380	44,107	86,382

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The regression results in Table **??** do not rely on exogenous variation in common ownership and, thus, perhaps obscure a true causal relation between common ownership and output prices. Therefore, we use changes in common ownership implied by mergers of financial institutions. There are 19 mergers that occur during the sample period for which we have price data. As the preperiod for each merger, we use the quarter prior to the announcement of the merger. The respective post periods over which we calculate changes from preperiod logged prices, etc., are the fourth, eighth, and twelfth quarters after the announcement quarter. We also use the average of the three post-period quarterly prices. We again compare measures of common ownership in the quarter prior to a given merger announcement to counterfactual measures computed under the assumption that the two institutions had already merged. The difference between the actual and counterfactual measure of common ownership for each merger, which we refer to as the implied change, is the instrument for the actual changes in common ownership across the pre and post periods. As in Azar et al. (2018), we switch from a difference in difference approach to an IV approach here as we want to obtain quantitative estimates of the effects of merger induced changes in common ownership on prices to facilitate potential comparisons of results across our respective papers. We include actual changes in the control variables from the OLS analysis as well as merger event fixed effects. Estimated standard errors are robust to heteroscedasticity.

Results of first stage regressions explaining actual changes in common ownership from before to after the mergers with implied changes from before the mergers and changes in control variables around the mergers are reported in Table IA 11. Coefficients on the implied changes in MHHI Delta are statistically significant in three of the four specifications indicating that the instrument generally satisfies the relevance condition. F-statistics range from 5.24-8.90. Coefficients on the implied changes in C are generally not significant with the exception of the changes over the shortest period, where the coefficient is negative.

Second stage results are reported in Table IA 12. The coefficients on instrumented changes in MHHI Delta are all negative with the changes between quarter minus one and plus eight relative to the mergers significant at the 5 percent level. The coefficients on instrumented changes in C vary in sign and are not significant in any case. The results of weak identification tests (Kleibergen-Paap Wald rk F-statistics) for the continuous IV are reported in Table IA 12. In untabulated results, we have also used discrete versions of the instrument, e.g., top vs. bottom terciles of implied changes, recoding all positive implied changes to equal one and all negative implied changes to equal negative one, etc. In general, the continuous IV appears to be the most relevant instrument. If common ownership causes

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anti-competitive behavior, then we would expect larger price increases following mergers of institutions that increase common ownership. Thus, the evidence from this analysis does not support the prediction of the COC hypothesis.

Table IA 11: First Stage IV Regressions of Industry Output Prices on Institutional Common Ownership

The dependent variables in the regressions below are the actual changes in common ownership across pre and post institutional merger periods. As an instrument for the actual changes in common ownership across the pre and post institutional merger periods, we use the implied change for each merger. The implied change is the actual common ownership measure in the quarter prior to the merger announcement minus the counterfactual measure computed under the assumption that the merger has already taken place. Changes in control variables are calculated as differences between their values at the quarter of the merger announcement and the indicated post period. The sample is all four-digit NAICS manufacturing industries that have sufficient data around the nineteen respective mergers. Variables are defined in Appendix A. All specifications include institution merger fixed effects. Standard errors are robust to heteroscedasticity and clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				Post Period				
				Avg. Qtrs.				Avg. Qtrs.
	Qtr. 4	Qtr. 8	Qtr. 12	4, 8, and 12	Qtr. 4	Qtr. 8	Qtr. 12	4, 8, and 12
Implied Change in	1.121	2.511**	1.774*	1.814**				
MHHI Delta	(1.015)	(2.437)	(1.901)	(2.052)				
Implied Change in C					-0.739**	-0.077	0.188	-0.225
					(-2.279)	(-0.254)	(0.520)	(-0.782)
Δ HHI	-1,691.907***	-2,071.294***	-2,364.293***	-2,126.817***	0.054	0.015	0.053	0.035
	(-5.305)	(-6.467)	(-7.170)	(-6.185)	(1.140)	(0.472)	(1.020)	(0.859)
Δ ln(Materials)	209.468	8.468	-51.098	10.456	-0.040	-0.018	-0.025	-0.024
	(1.023)	(0.049)	(-0.330)	(0.063)	(-1.301)	(-0.806)	(-1.005)	(-0.979)
Δ ln(Wages)	-204.478	66.265	348.304	105.014	0.094	0.059	-0.014	-0.016
	(-0.178)	(0.074)	(0.393)	(0.109)	(0.767)	(0.829)	(-0.229)	(-0.210)
Δ ln(Quantity)	49.944	-102.060	-94.704	-82.700	0.058*	0.013	0.011	0.025
	(0.165)	(-0.561)	(-0.497)	(-0.474)	(1.680)	(0.347)	(0.299)	(0.711)
Merger Effects	Y	Y	Y	Y	Y	Y	Y	Y
Observations	652	651	647	654	652	651	647	654
R^2	0.116	0.131	0.162	0.142	0.129	0.094	0.135	0.112

Table IA 12:   Second Stage IV Regressions of Industry Output Prices on Institutional Common Ownership

This table reports the second stage results of instrumental variable regressions of changes in output prices on changes in common ownership, changes in the costs of materials and labor used in production, and changes in demand for industry output. As an instrument for the actual changes in common ownership across the pre and post institutional merger periods, we use the difference between actual and counterfactual common ownership for each merger, i.e., the implied change. The implied change is the actual common ownership measure in the quarter prior to the merger announcement minus the counterfactual measure computed under the assumption that the merger has already taken place. Changes in prices, actual common ownership, and control variables are calculated as differences between their values at the quarter of the merger announcement and the indicated post period. The sample is all four-digit NAICS manufacturing industries that have sufficient data. Variables are defined in Appendix A. All specifications include institution merger fixed effects. Standard errors are robust to heteroscedasticity and clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				Post Period				
				Avg. Qtrs.				Avg. Qtrs.
	Qtr. 4	Qtr. 8	Qtr. 12	4, 8, and 12	Qtr. 4	Qtr. 8	Qtr. 12	4, 8, and 12
ΔMHHI Delta	-0.000	-0.000**	-0.000	-0.000				
	(-0.735)	(-1.984)	(-1.331)	(-1.554)				
Δ C					-0.766	1.010	2.260	-1.408
					(-0.948)	(0.095)	(0.415)	(-0.471)
ΔHHI	-0.231	-0.318**	-0.307	-0.317*	0.009	-0.035	-0.166	0.004
	(-0.819)	(-1.988)	(-1.461)	(-1.703)	(0.166)	(-0.207)	(-0.487)	(0.036)
Δln(Materials)	0.348***	0.334***	0.288***	0.318***	0.291***	0.349*	0.350**	0.282**
	(3.593)	(3.709)	(4.187)	(3.877)	(2.645)	(1.680)	(2.165)	(2.139)
Δln(Wages)	0.126	0.133	-0.029	0.060	0.225	0.060	-0.037	0.022
	(0.597)	(0.853)	(-0.261)	(0.407)	(1.071)	(0.097)	(-0.209)	(0.126)
Δln(Quantity)	-0.152**	-0.173**	-0.165***	-0.165**	-0.115	-0.173	-0.179	-0.120
	(-1.974)	(-2.409)	(-2.668)	(-2.462)	(-1.511)	(-1.222)	(-1.581)	(-1.092)
Merger Effects	Y	Y	Y	Y	Y	Y	Y	Y
Observations	652	651	647	654	652	651	647	654
F-stat (Weak Identification Test)	1.029	5.939	3.612	4.212	5.194	0.0646	0.270	0.611

Table IA 13: Panel Regressions of Manufacturing Industry PCMs on Institutional Common Ownership

This table reports the results of multivariate OLS regressions explaining manufacturing industry price-cost margins (PCM_{ASM}) with common ownership and controls for for differences in industry structure. The sample is all four-digit NAICS manufacturing industries that have sufficient data available from the US Census Bureau Annual Survey of Manufacturers to calculate PCM_{ASM} as defined in the text. Shipment Growth is the percentage change in the total value of shipments. Other variables are defined in Appendix A. All specifications include industry and quarter fixed effects. Standard errors are robust to heteroscedasticity and clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)
Density	0.005				
	(0.388)				
PCF		-0.013			
		(-0.804)			
PCS			0.012		
			(0.795)		
MHHI Delta				0.000	
				(0.836)	
C					-0.005
					(-0.243)
Capital Intensity	0.002	0.002	0.002	0.002	0.002
	(1.003)	(0.994)	(1.025)	(1.136)	(0.959)
Shipment Growth	0.001***	0.001***	0.001***	0.001***	0.001***
	(5.619)	(5.659)	(5.640)	(5.627)	(5.589)
R&D Intensity	0.256	0.329	0.261	0.271	0.275
	(0.211)	(0.273)	(0.217)	(0.224)	(0.228)
R&D Missing	0.005	0.005	0.005	0.005	0.006
	(0.715)	(0.673)	(0.638)	(0.685)	(0.730)
Leverage	-0.018	-0.018	-0.017	-0.018	-0.018
	(-1.108)	(-1.121)	(-1.054)	(-1.079)	(-1.107)
Quarter Effects	Y	Y	Y	Y	Y
Industry Effects	Y	Y	Y	Y	Y
Observations	1,179	1,179	1,179	1,179	1,179
R^2	0.215	0.215	0.215	0.216	0.215
Industries	83	83	83	83	83

Table IA 14: Panel Regressions of Industry Profitability on Institutional Common Ownership Using Combined Holdings

This table reports the results of multivariate OLS regressions explaining industry-level Markups and Margins with five measures of common ownership and controls for other aspects of institutional ownership and for differences in industry structure. The measures of common ownership are calculated after combining the holdings of certain institutions following the replication packet for Azar et al. (2018). Columns 1-5 use Markups as the dependent variable, and columns 6-10 use PCMs. All specifications include quarter and industry fixed effects. Standard errors are robust to heteroscedasticity and clustered at the industry level. Variables are defined in Appendix A. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

Profitability	(1) Markup	(2) Markup	(3) Markup	(4) Markup	(5) Markup	(6) PCM	(7) PCM	(8) PCM	(9) PCM	(10) PCM
Density	0.004 (0.352)					0.000 (0.027)				
PCF		0.006 (0.291)					0.015 (1.155)			
PCS			0.033** (2.424)					0.013 (0.815)		
MHHI Delta				0.000 (0.398)					-0.000 (-0.165)	
C					-0.004 (-0.269)					-0.010 (-0.456)
Off Degree	-2.401*** (-2.632)	-2.502** (-2.522)	-2.826*** (-3.066)	-2.393*** (-2.853)	-2.307*** (-2.693)	-2.629*** (-3.416)	-3.052*** (-3.666)	-2.813*** (-3.532)	-2.596*** (-3.624)	-2.551*** (-3.424)
Log Assets	0.018** (2.226)	0.018** (2.225)	0.018** (2.283)	0.018** (2.219)	0.018** (2.223)	0.012** (2.334)	0.012** (2.319)	0.013** (2.360)	0.012** (2.307)	0.012** (2.340)
1/No. Firms	0.183** (2.563)	0.185** (2.575)	0.165** (2.231)	0.183*** (2.606)	0.185** (2.591)	0.109 (1.585)	0.111 (1.632)	0.102 (1.458)	0.110 (1.599)	0.111 (1.615)
hhi	-0.000*** (-2.976)	-0.000*** (-3.009)	-0.000*** (-2.992)	-0.000*** (-3.040)	-0.000*** (-3.004)	-0.000*** (-2.601)	-0.000** (-2.593)	-0.000** (-2.612)	-0.000** (-2.484)	-0.000*** (-2.627)
Firms With Blocks	0.033*** (2.854)	0.033*** (2.708)	0.023* (1.964)	0.034*** (2.832)	0.034*** (2.838)	0.021 (1.529)	0.020 (1.451)	0.016 (1.168)	0.021 (1.515)	0.021 (1.526)
Capital Intensity	-0.002 (-0.518)	-0.002 (-0.518)	-0.002 (-0.513)	-0.002 (-0.518)	-0.002 (-0.519)	-0.001 (-0.280)	-0.001 (-0.280)	-0.001 (-0.277)	-0.001 (-0.281)	-0.001 (-0.284)
Sales Growth	0.000** (2.262)	0.000** (2.274)	0.000** (2.215)	0.000** (2.263)	0.000** (2.255)	0.000** (2.028)	0.000** (2.057)	0.000** (2.021)	0.000** (2.030)	0.000** (2.010)
R&D Intensit	-0.202 (-0.437)	-0.203 (-0.439)	-0.180 (-0.392)	-0.202 (-0.437)	-0.204 (-0.441)	0.116 (0.166)	0.114 (0.162)	0.125 (0.178)	0.116 (0.165)	0.112 (0.160)
R&D missing	0.013** (2.279)	0.013** (2.286)	0.013** (2.228)	0.013** (2.276)	0.013** (2.298)	-0.005 (-0.765)	-0.005 (-0.780)	-0.005 (-0.785)	-0.005 (-0.764)	-0.005 (-0.761)
Leverage	-0.073*** (-3.764)	-0.073*** (-3.747)	-0.074*** (-3.823)	-0.072*** (-3.706)	-0.072*** (-3.741)	-0.048 (-1.576)	-0.048 (-1.571)	-0.048 (-1.589)	-0.048 (-1.597)	-0.047 (-1.550)
Quarter Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Industry Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	24,310	24,310	24,310	24,310	24,310	24,296	24,296	24,296	24,296	24,296
R²	0.052	0.052	0.053	0.052	0.052	0.034	0.034	0.034	0.034	0.034
Industries	269	269	269	269	269	269	269	269	269	269

Table IA 15: Difference-in-Difference Regressions of Industry PCMs on Institutional Common Ownership; Correspondence Between Industry Definitions and Product Markets

This table summarizes the results from difference-in-difference regressions for various subsamples. The specifications correspond to those in columns 5 and 10 from Table ??. The sample includes 12 quarters prior to each of the 48 merger announcements and 12 quarters after each merger is completed. The periods between announcement and completion are not included. Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is positive for that industry, zero otherwise. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively

| Panel A | Geographic Overlap Not Missing | Local ⟵→ National Geographic Overlap Decile Subsamples | | | | | | | | | |
		Low	2	3	4	5	6	7	8	9	High
Treat$_{MHHI\ Delta}$*Post	-0.001	-0.001	0.002	-0.000	0.002	-0.001	-0.001	-0.001	-0.001	0.002	-0.002
t-statistic	(-1.037)	(-1.127)	(1.058)	(-0.132)	(1.155)	(-0.790)	(-0.305)	(-0.277)	(-0.475)	(0.520)	(-0.273)
Standard Error	0.001	0.001	0.002	0.002	0.002	0.002	0.003	0.002	0.003	0.004	0.006
R^2	0.042	0.186	0.116	0.160	0.134	0.085	0.089	0.093	0.101	0.081	0.196
Treat$_C$*Post	-0.002	-0.000	0.003	-0.002	-0.000	-0.002	-0.001	0.001	-0.002	-0.001	-0.004
t-statistic	(-1.519)	(-0.342)	(1.655)	(-0.992)	(-0.258)	(-1.330)	(-0.277)	(0.571)	(-0.671)	(-0.273)	(-0.572)
standard error	0.001	0.001	0.002	0.002	0.001	0.001	0.003	0.002	0.003	0.004	0.007
R^2	0.042	0.186	0.116	0.160	0.134	0.085	0.089	0.093	0.101	0.081	0.196
Observations	123,649	12,361	12,440	12,312	12,379	12,171	12,637	12,286	11,375	13,879	11,809
Industries	268	49	74	95	129	135	124	147	121	151	104

| Panel B | Shipping Distance Not Missing | Local ⟵→ National Shipping Distance Quartile Subsamples | | | |
		Low	2	3	High
Treat$_{MHHI\ Delta}$*Post	-0.002	-0.003	0.001	0.001	0.001
t-statistic	(-1.004)	(-0.730)	(0.390)	(0.279)	(0.247)
standard error	0.002	0.004	0.002	0.003	0.003
R^2	0.057	0.106	0.111	0.149	0.145
Treat$_C$*Post	-0.003**	0.002	0.000	-0.002	-0.002
t-statistic	(-2.062)	(0.436)	(0.039)	(-0.792)	(-0.843)
standard error	0.001	0.004	0.002	0.003	0.002
R^2	0.057	0.106	0.111	0.149	0.145
Observations	75,567	18,379	19,698	17,481	20,009
Industries	106	33	38	34	27

IA.3. Replication of Results using SIC-defined Industries

Table IA 16: Summary Statistics of SIC-defined Industries

This table presents summary statistics for quarterly industry-level common ownership, profitability, and other variables used in our analysis. Variables are defined in Appendix A. Data are from Thomson Reuters 13F, CRSP, and Compustat for the period starting with the first quarter of 1987 and ending with the fourth quarter of 2012. At the firm-level, we require firms to have total assets of at least $1 million, net sales of at least $250,000, and net sales greater than EBIT. Industries are defined using 3-digit SIC codes. We require industries to have at least two firms in every industry-quarter for a minimum of 20 consecutive quarters to remain in the sample. There are 264 industries that meet the sample screen.

	Mean	Std. Dev.	P25	Median	P75	N
Density	0.095	0.150	0.000	0.044	0.127	25,568
PCF	0.152	0.136	0.000	0.143	0.250	25,568
PCS	0.284	0.171	0.167	0.250	0.357	25,568
MHHI delta	1,367.279	1,008.552	578.568	1,217.295	1,957.262	25,568
C	0.160	0.104	0.099	0.145	0.202	25,568
Markup	1.129	0.288	1.031	1.073	1.131	25,568
PCM	0.300	0.170	0.215	0.301	0.390	25,515
Off Degree (x 1,000)	8.264	8.143	0.000	7.460	14.799	25,160
Firms With Blocks	0.685	0.222	0.533	0.700	0.842	25,568
1/No. Firms	0.148	0.133	0.050	0.100	0.200	25,568
HHI	3,426.533	2,226.326	1,732.453	2,837.154	4,668.379	25,568
Log Assets	9.287	2.074	7.964	9.205	10.557	25,568
Sales Growth	0.625	16.407	-0.060	0.024	0.118	25,517
Capital Intensity	6.443	9.678	2.746	3.845	5.782	25,568
R&D Intensity	0.002	0.006	0.000	0.000	0.001	25,568
R&D missing	0.367	0.482	0.000	0.000	1.000	25,568
Leverage	0.312	0.207	0.153	0.267	0.435	25,552
Concentrated	0.297	0.457	0.000	0.000	1.000	25,568

Table IA 17: Changes in Profitability around Large Changes in Common Ownership using SIC-defined Industries

This table reports changes in profitability around large quarterly changes in common institutional ownership. We identify large changes in two ways. First, quarterly changes in industry common ownership of more than two standard deviations beyond the mean industry quarterly change are defined as significant. Second, we identify structural breaks using a simple model in which common ownership is a function of a time varying level and an error term. Any industry level shift that is statistically significant at the 5% level is determined to be a significant change in common ownership. Changes in operations are measured as the industry average over the four quarters subsequent to the change (quarter t=1 to t=4) minus to the industry average over the four quarters prior to the change (quarter t=-4 to t=-1). Variables are defined in Appendix A. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

Inc./Dec.	2SD/SB	Profitability	C.O.	Pre	Post	Diff.	t-statistic	N
Increase	2SD	Markup	Density	1.121	1.123	0.002	(0.67)	719
Increase	2SD	Markup	PCF	1.124	1.125	0.001	(0.47)	673
Increase	2SD	Markup	PCS	1.120	1.120	0.000	(0.15)	777
Increase	2SD	Markup	MHHI Delta	1.140	1.142	0.001	(0.42)	698
Increase	2SD	Markup	C	1.130	1.130	0.000	(-0.06)	692
Increase	2SD	PCM	Density	0.303	0.309	0.006	(1.70)*	719
Increase	2SD	PCM	PCF	0.286	0.296	0.010	(2.68)***	672
Increase	2SD	PCM	PCS	0.303	0.306	0.003	(1.02)	776
Increase	2SD	PCM	MHHI Delta	0.295	0.300	0.006	(1.76)*	694
Increase	2SD	PCM	C	0.292	0.295	0.003	(1.10)	688
Increase	SB	Markup	Density	1.091	1.101	0.010	(1.00)	91
Increase	SB	Markup	PCF	1.137	1.135	-0.002	(-0.35)	92
Increase	SB	Markup	PCS	1.145	1.142	-0.003	(-0.38)	101
Increase	SB	Markup	MHHI Delta	1.164	1.158	-0.005	(-0.76)	106
Increase	SB	Markup	C	1.153	1.149	-0.004	(-0.53)	90
Increase	SB	PCM	Density	0.292	0.309	0.017	(1.67)*	90
Increase	SB	PCM	PCF	0.299	0.300	0.000	(0.02)	91
Increase	SB	PCM	PCS	0.294	0.312	0.017	(1.94)*	101
Increase	SB	PCM	MHHI Delta	0.311	0.321	0.010	(1.00)	106
Increase	SB	PCM	C	0.303	0.306	0.003	(0.31)	90
Decrease	2SD	Markup	Density	1.106	1.105	-0.001	(-0.35)	552
Decrease	2SD	Markup	PCF	1.104	1.104	0.001	(0.22)	624
Decrease	2SD	Markup	PCS	1.121	1.121	0.000	(-0.09)	612
Decrease	2SD	Markup	MHHI Delta	1.111	1.116	0.005	(1.46)	628
Decrease	2SD	Markup	C	1.101	1.103	0.003	(0.84)	577
Decrease	2SD	PCM	Density	0.306	0.305	-0.001	(-0.35)	552
Decrease	2SD	PCM	PCF	0.289	0.290	0.002	(0.48)	616
Decrease	2SD	PCM	PCS	0.305	0.307	0.003	(0.72)	609
Decrease	2SD	PCM	MHHI Delta	0.296	0.294	-0.001	(-0.38)	628
Decrease	2SD	PCM	C	0.281	0.287	0.006	(1.43)	575
Decrease	SB	Markup	Density	1.104	1.116	0.012	(1.44)	77
Decrease	SB	Markup	PCF	1.131	1.140	0.009	(0.99)	76
Decrease	SB	Markup	PCS	1.126	1.139	0.012	(1.32)	84
Decrease	SB	Markup	MHHI Delta	1.120	1.125	0.005	(0.53)	75
Decrease	SB	Markup	C	1.106	1.100	-0.005	(-0.45)	68
Decrease	SB	PCM	Density	0.280	0.305	0.025	(2.36)**	77
Decrease	SB	PCM	PCF	0.299	0.296	-0.003	(-0.24)	75
Decrease	SB	PCM	PCS	0.275	0.286	0.008	(0.85)	83
Decrease	SB	PCM	MHHI Delta	0.288	0.279	-0.008	(-0.99)	75
Decrease	SB	PCM	C	0.288	0.291	0.003	(0.22)	68

Table IA 18: Panel Regressions of Industries' Markups on Density using SIC-defined Industries

This table reports the results of multivariate OLS regressions explaining industry-level profitability with Density and controls for other aspects of institutional ownership and for differences in industry structure. All specifications include quarter fixed effects. Industry fixed effects are also included where indicated. Standard errors are robust to heteroscedasticity and clustered at the industry level. Variables are defined in Appendix A. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)
Density	0.022	0.027	0.005	0.023	0.001
	(0.271)	(1.276)	(0.288)	(1.290)	(0.052)
Off Degree (x 1,000)			0.001		0.001
			(1.079)		(1.254)
ln(Assets)			0.016***		0.025***
			(2.871)		(3.554)
1 / No. Firms			0.274***		0.298***
			(3.469)		(3.620)
HHI			-0.000***		-0.000***
			(-3.782)		(-3.626)
Firms with Blocks			0.010		0.008
			(0.589)		(0.515)
Capital Intensity				-0.001	-0.002
				(-0.666)	(-1.113)
Sales Growth				-0.000**	-0.000**
				(-2.399)	(-2.331)
R&D Intensity				-1.141***	-0.918***
				(-2.995)	(-2.821)
R&D Missing				0.012**	0.013**
				(2.233)	(2.035)
Leverage				-0.079***	-0.088***
				(-3.079)	(-4.003)
Quarter Effects	Y	Y	Y	Y	Y
Industry Effects	N	Y	Y	Y	Y
Observations	25,568	25,568	25,160	25,502	25,108
R^2	0.004	0.023	0.043	0.039	0.063
Industries		264	264	264	264

Table IA 19: Panel Regressions of Industry Profitability on Institutional Common Ownership using SIC-defined Industries, Summary of Results

This table reports the results of multivariate OLS regressions explaining industry-level Markups with common ownership and controls for other aspects of institutional ownership and for differences in industry structure. The specification is the same as column 5 from Table ??. All specifications include industry and quarter fixed effects. Standard errors are robust to heteroscedasticity and clustered at the industry level. Variables are defined in Appendix A. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

		Subsample	
Profitability	C.O.	Full	Concen-trated=1
		Coefficient	
Markup	Density	0.001	0.012
	PCF	0.005	-0.003
	PCS	0.018	0.056
	MHHI Delta	0.000	0.000
	C	0.019	0.032
PCM	Density	-0.023	-0.011
	PCF	-0.010	0.002
	PCS	-0.022	-0.015
	MHHI Delta	-0.000	-0.000**
	C	-0.050**	-0.079**
		t-statistic	
Markup	Density	(0.052)	(0.579)
	PCF	(0.277)	(-0.089)
	PCS	(0.803)	(1.527)
	MHHI Delta	(0.461)	(0.941)
	C	(0.648)	(0.805)
PCM	Density	(-1.398)	(-0.790)
	PCF	(-0.460)	(0.042)
	PCS	(-1.117)	(-0.663)
	MHHI Delta	(-1.184)	(-2.205)
	C	(-2.101)	(-2.587)
		N	
Markup	Density	25,108	7,253
	PCF	25,108	7,253
	PCS	25,108	7,253
	MHHI Delta	25,108	7,253
	C	25,108	7,253
PCM	Density	25,101	7,247
	PCF	25,101	7,247
	PCS	25,101	7,247
	MHHI Delta	25,101	7,247
	C	25,101	7,247

Table IA 20: Difference-in-Difference Regressions of Industries' Markups on Institutional Common Ownership using SIC-defined Industries

This table presents results of difference-in-difference regressions. The sample includes 12 quarters prior to each merger announcement and 12 quarters after each merger is completed. The periods between announcement and completion are not included. Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is positive for that industry, zero otherwise. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Treat$_{MHHI Delta}$*Post	-0.002	-0.004*	-0.005**	-0.003*	-0.005**					
	(-0.661)	(-1.707)	(-2.135)	(-1.665)	(-2.151)					
Treat$_{MHHI Delta}$	0.011									
	(0.748)									
Treat$_C$*Post						-0.002	-0.001	-0.002	-0.001	-0.002
						(-0.663)	(-0.487)	(-1.013)	(-0.297)	(-0.921)
Treat$_C$						0.003				
						(0.257)				
Off Degree (x 1,000)			0.000		0.000			0.000		0.000
			(1.002)		(0.986)			(0.990)		(0.974)
ln(Assets)			0.017***		0.025***			0.017***		0.025***
			(3.182)		(4.004)			(3.178)		(4.002)
1 / No. Firms			0.236***		0.253***			0.236***		0.253***
			(3.541)		(3.671)			(3.547)		(3.677)
HHI			-0.112***		-0.102***			-0.112***		-0.102***
			(-3.878)		(-3.634)			(-3.875)		(-3.632)
Firms with Blocks			0.009		0.009			0.009		0.009
			(0.553)		(0.578)			(0.547)		(0.571)
Capital Intensity				-0.000*	-0.000*				-0.000*	-0.000*
				(-1.893)	(-1.769)				(-1.892)	(-1.768)
Sales Growth				-1.015***	-0.815**				-1.015***	-0.816**
				(-2.595)	(-2.375)				(-2.596)	(-2.377)
R&D Intensity				0.016***	0.016**				0.016***	0.016**
				(2.801)	(2.480)				(2.801)	(2.476)
R&D Missing				-0.083***	-0.090***				-0.083***	-0.090***
				(-3.030)	(-3.624)				(-3.029)	(-3.622)
Leverage										
Quarter Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Industry Effects		Y	Y	Y	Y		Y	Y	Y	Y
Observations	189,924	189,924	187,018	189,612	186,767	189,924	189,924	187,018	189,612	186,767
R^2	0.003	0.021	0.039	0.037	0.058	0.003	0.021	0.039	0.036	0.058
Industries	269	269	269	269	269	269	269	269	269	269

Table IA 21:   Difference-in-Difference Regressions of Industries' Markups on Institutional Common Ownership using SIC-defined Industries: Alternative Treatment Definitions

This table presents results of difference-in-difference regressions. The sample includes 12 quarters prior to each of the 48 institutional merger announcements and 12 quarters after each merger is completed. The periods between announcement and completion are not included. In the first four columns, Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is above the 90th percentile, zero otherwise. Columns 5 through 8 identify treated industries as those with implied changes above the 95th percentile. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

| | 90th | | | | 95th | | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\text{Treat}_{\text{MHHI Delta}}$*Post	-0.003	-0.002			-0.009**	-0.007		
	(-1.021)	(-0.609)			(-2.144)	(-1.416)		
$\text{Treat}_{\text{MHHI Delta}}$	0.006				0.019			
	(0.388)				(0.782)			
Treat_{C}*Post			-0.000	0.002			-0.001	0.002
			(-0.118)	(0.640)			(-0.307)	(0.391)
Treat_{C}			0.010				0.012	
			(0.770)				(0.862)	
Off Degree (x 1,000)		0.000		0.000		0.000		0.000
		(0.980)		(0.968)		(0.985)		(0.968)
ln(Assets)		0.025***		0.025***		0.025***		0.025***
		(3.996)		(4.000)		(3.999)		(3.994)
1 / No. Firms		0.253***		0.253***		0.253***		0.253***
		(3.674)		(3.680)		(3.671)		(3.679)
HHI		-0.102***		-0.102***		-0.102***		-0.102***
		(-3.632)		(-3.630)		(-3.631)		(-3.631)
Firms with Blocks		0.009		0.009		0.009		0.009
		(0.570)		(0.569)		(0.573)		(0.568)
Capital Intensity		-0.002		-0.002		-0.002		-0.002
		(-1.172)		(-1.172)		(-1.172)		(-1.171)
Sales Growth		-0.000*		-0.000*		-0.000*		-0.000*
		(-1.768)		(-1.767)		(-1.767)		(-1.767)
R&D Intensity		-0.817**		-0.816**		-0.817**		-0.817**
		(-2.379)		(-2.379)		(-2.379)		(-2.380)
R&D Missing		0.016**		0.016**		0.016**		0.016**
		(2.475)		(2.475)		(2.477)		(2.472)
Leverage		-0.090***		-0.090***		-0.090***		-0.090***
		(-3.622)		(-3.621)		(-3.621)		(-3.620)
Quarter Effects	Y	Y	Y	Y	Y	Y	Y	Y
Industry Effects		Y		Y		Y		Y
Observations	189,924	186,767	189,924	186,767	189,924	186,767	189,924	186,767
R^2	0.003	0.058	0.003	0.058	0.003	0.058	0.003	0.058
Industries	269	269	269	269	269	269	269	269

Table IA 22: Difference-in-Difference Regressions of Industries' PCMs on Institutional Common Ownership using SIC-defined Industries: Alternative Treatment Definitions

This table presents results of difference-in-difference regressions. The sample includes 12 quarters prior to each of the 48 institutional merger announcements and 12 quarters after each merger is completed. The periods between announcement and completion are not included. In the first four columns, Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is above the 90th percentile, zero otherwise. Columns 5 through 8 identify treated industries as those with implied changes above the 95th percentile. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

	90th				95th			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$Treat_{MHHI\ Delta}*Post$	-0.004	-0.003			-0.008	-0.004		
	(-1.441)	(-1.141)			(-1.423)	(-1.182)		
$Treat_{MHHI\ Delta}$	-0.003				-0.008			
	(-0.410)				(-0.826)			
$Treat_C*Post$			-0.005*	-0.003			-0.006	-0.004
			(-1.812)	(-1.214)			(-1.351)	(-1.029)
$Treat_C$			-0.004				-0.017**	
			(-0.606)				(-2.427)	
Off Degree (x 1,000)		-0.000		-0.000		-0.000		-0.000
		(-0.414)		(-0.422)		(-0.418)		(-0.416)
ln(Assets)		0.014***		0.014***		0.014***		0.014***
		(3.350)		(3.350)		(3.348)		(3.352)
1 / No. Firms		0.090		0.090		0.090		0.090
		(1.572)		(1.574)		(1.571)		(1.574)
HHI		-0.034*		-0.034*		-0.034*		-0.034*
		(-1.693)		(-1.694)		(-1.691)		(-1.691)
Firms with Blocks		0.014		0.014		0.014		0.014
		(0.898)		(0.897)		(0.898)		(0.899)
Capital Intensity		-0.001		-0.001		-0.001		-0.001
		(-0.466)		(-0.463)		(-0.465)		(-0.466)
Sales Growth		-0.000		-0.000		-0.000		-0.000
		(-1.282)		(-1.282)		(-1.282)		(-1.282)
R&D Intensity		-0.854*		-0.855*		-0.854*		-0.854*
		(-1.890)		(-1.892)		(-1.890)		(-1.889)
R&D Missing		0.004		0.004		0.004		0.004
		(0.813)		(0.805)		(0.810)		(0.810)
Leverage		-0.095***		-0.095***		-0.095***		-0.095***
		(-6.098)		(-6.094)		(-6.095)		(-6.095)
Quarter Effects	Y	Y	Y	Y	Y	Y	Y	Y
Industry Effects		Y		Y		Y		Y
Observations	189,732	186,722	189,732	186,722	189,732	186,722	189,732	186,722
R^2	0.011	0.037	0.011	0.037	0.011	0.037	0.012	0.037
Industries	269	269	269	269	269	269	269	269

Table IA 23:   Difference-in-Difference Regressions of Industry Profitability on Institutional Common Ownership, Summary of Results using SIC-defined Industries

This table summarizes the coefficient of interest from difference-in-difference regressions for the full sample and various sub-samples. The specifications correspond to those in columns 5 and 10 from Table **??**. The sample includes 12 quarters prior to each of the 48 merger announcements and 12 quarters after each merger is completed. The periods between announcement and completion are not included. Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is positive for that industry, zero otherwise. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

Profitability	C.O.	Full	Concen-trated=1
		Coefficient	
Markup	MHHI Delta	-0.005**	-0.005
	C	-0.002	-0.000
PCM	MHHI Delta	-0.003**	-0.002
	C	-0.003*	-0.002
		t-statistic	
Markup	MHHI Delta	(-2.151)	(-0.680)
	C	(-0.921)	(-0.032)
PCM	MHHI Delta	(-1.991)	(-0.435)
	C	(-1.688)	(-0.412)
		N	
Markup	MHHI Delta	186,767	55,288
	C	186,767	55,288
PCM	MHHI Delta	186,772	55,244
	C	186,772	55,244

Table IA 24: Difference-in-Difference Regressions of Industry Profitability on Institutional Common Ownership; Correspondence Between SIC Industry Definitions and Product Markets

This table summarizes the results from difference-in-difference regressions for various subsamples. The specifications correspond to those in columns 5 and 10 from Table ??. The sample includes 12 quarters prior to each of the 48 merger announcements and 12 quarters after each merger is completed. The periods between announcement and completion are not included. Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is positive for that industry, zero otherwise. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively

	Geographic Overlap Not Missing	Low	2	3	4	5	6	7	8	9	High
						Geographic Overlap Decile Subsamples					
Panel A: Markups											
Treat$_{MHHI\ Delta}$*Post	-0.003*	-0.001	-0.001	-0.002	-0.000	0.001	0.002	0.003	-0.000	-0.006	0.003
t-statistic	(-1.799)	(-0.743)	(-0.288)	(-1.346)	(-0.021)	(0.339)	(0.743)	(0.993)	(-0.125)	(-1.389)	(0.412)
Standard Error	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.004	0.004	0.008
R^2	0.069	0.188	0.079	0.148	0.144	0.115	0.124	0.106	0.177	0.174	0.103
Treat$_C$*Post	-0.001	-0.000	-0.001	-0.001	0.001	0.003	0.003	0.002	0.001	-0.006	0.006
t-statistic	(-0.875)	(-0.172)	(-0.578)	(-0.436)	(0.292)	(1.475)	(0.798)	(0.647)	(0.378)	(-1.363)	(0.759)
Standard Error	0.002	0.001	0.003	0.002	0.002	0.002	0.003	0.003	0.003	0.004	0.008
R^2	0.069	0.188	0.079	0.147	0.144	0.115	0.124	0.106	0.177	0.174	0.103
Observations	138,332	13,841	13,979	13,892	13,908	13,806	14,042	13,717	12,609	15,650	12,888
Industries	263	56	93	121	136	137	148	141	121	161	102
Panel B: PCMs											
Treat$_{MHHI\ Delta}$*Post	-0.002*	-0.000	-0.001	-0.002	0.001	0.001	-0.003*	0.001	-0.003	-0.002	0.006
t-statistic	(-1.823)	(-0.152)	(-0.797)	(-0.914)	(0.355)	(0.696)	(-1.944)	(0.525)	(-0.952)	(-0.714)	(0.979)
Standard Error	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.006
R^2	0.045	0.154	0.080	0.116	0.108	0.060	0.091	0.065	0.068	0.185	0.069
Treat$_C$*Post	-0.002	0.000	-0.001	-0.002	-0.001	0.001	-0.004*	0.001	0.000	-0.001	0.006
t-statistic	(-1.646)	(0.291)	(-0.689)	(-1.160)	(-0.377)	(0.449)	(-1.839)	(0.353)	(0.023)	(-0.353)	(0.985)
Standard Error	0.001	0.001	0.002	0.002	0.002	0.001	0.002	0.003	0.003	0.003	0.007
R^2	0.045	0.154	0.080	0.116	0.108	0.060	0.091	0.065	0.068	0.185	0.069
Observations	138,306	13,841	13,979	13,892	13,908	13,806	14,042	13,717	12,609	15,650	12,862
Industries	263	56	93	121	136	137	148	141	121	161	102

IA.4. Replication of Results using H&P defined Industries

Table IA 25: Summary Statistics of H&P-defined Industries

This table presents summary statistics for quarterly industry-level common ownership, profitability, and other variables used in our analysis. Variables are defined in Appendix A. Data are from Thomson Reuters 13F, CRSP, and Compustat for the period starting with the first quarter of 1996 and ending with the fourth quarter of 2012. At the firm-level, we require firms to have total assets of at least $1 million, net sales of at least $250,000, and net sales greater than EBIT. Industries are defined using the 300 fixed-classification industries from Hoberg and Phillips (2016). MHHI Delta is winsorized at 10,000 (50 observations affected), and C is winsorized at 1.34 (59 observations affected). We require industries to have at least two firms in every industry-quarter for a minimum of 20 consecutive quarters to remain in the sample. There are 261 industries that meet the sample screen.

	Mean	Std. Dev.	P25	Median	P75	N
Density	0.121	0.173	0.000	0.067	0.167	15,977
PCF	0.163	0.142	0.000	0.158	0.267	15,977
PCS	0.325	0.178	0.200	0.294	0.429	15,977
MHHI Delta	1,635.476	1,334.711	631.705	1,391.187	2,363.960	15,977
C	0.185	0.145	0.109	0.164	0.232	15,977
Markup	1.108	0.269	1.022	1.075	1.135	15,977
PCM	0.329	0.200	0.246	0.336	0.437	15,932
Off Degree (x 1,000)	9.568	9.475	0.000	8.017	16.976	15,780
Firms With Blocks	0.732	0.213	0.600	0.750	0.889	15,977
1/NoFirms	0.166	0.146	0.053	0.125	0.250	15,977
HHI	3,944.648	2,496.298	1,977.188	3,495.545	5,364.849	15,977
Log Assets	8.976	2.274	7.396	8.831	10.613	15,977
Sales Growth	0.728	35.351	-0.047	0.026	0.106	15,946
Capital Intensity	5.891	7.294	2.905	3.958	5.826	15,977
R&D Intensity	0.005	0.009	0.000	0.001	0.007	15,977
R&D missing	0.175	0.380	0.000	0.000	0.000	15,977
Leverage	0.240	0.183	0.100	0.198	0.339	15,959
Concentrated	0.291	0.454	0.000	0.000	1.000	15,977

Table IA 26: Changes in Profitability around Large Changes in Common Ownership using H&P-defined Industries

This table reports changes in profitability around large quarterly changes in common institutional ownership. We identify large changes in two ways. First, quarterly changes in industry common ownership of more than two standard deviations beyond the mean industry quarterly change are defined as significant. Second, we identify structural breaks using a simple model in which common ownership is a function of a time varying level and an error term. Any industry level shift that is statistically significant at the 5% level is determined to be a significant change in common ownership. Changes in profitability are measured as the industry average over the four quarters subsequent to the change (quarter t=1 to t=4) minus to the industry average over the four quarters prior to the change (quarter t=-4 to t=-1). Variables are defined in Appendix A. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

Inc./Dec.	2SD/SB	Profitability	C.O.	Pre	Post	Diff.	t-statistic	N
Increase	2SD	Markup	Density	1.102	1.105	0.003	(0.87)	420
Increase	2SD	Markup	PCF	1.100	1.108	0.008	(2.11)**	381
Increase	2SD	Markup	PCS	1.123	1.122	-0.001	(-0.15)	484
Increase	2SD	Markup	MHHI Delta	1.126	1.128	0.002	(0.43)	404
Increase	2SD	Markup	C	1.101	1.103	0.003	(0.67)	436
Increase	2SD	PCM	Density	0.333	0.334	0.000	(0.06)	417
Increase	2SD	PCM	PCF	0.330	0.335	0.006	(1.26)	377
Increase	2SD	PCM	PCS	0.343	0.340	-0.004	(-0.71)	480
Increase	2SD	PCM	MHHI Delta	0.338	0.338	0 .000	(0.06)	402
Increase	2SD	PCM	C	0.327	0.334	0.006	(1.48)	434
Increase	SB	Markup	Density	1.079	1.103	0.024	(2.29)**	53
Increase	SB	Markup	PCF	1.140	1.151	0.011	(1.03)	59
Increase	SB	Markup	PCS	1.046	1.058	0.011	(1.03)	40
Increase	SB	Markup	MHHI Delta	1.100	1.107	0.007	(0.67)	54
Increase	SB	Markup	C	1.048	1.038	-0.01	(-0.56)	33
Increase	SB	PCM	Density	0.320	0.352	0.031	(2.13)**	52
Increase	SB	PCM	PCF	0.321	0.339	0.018	(1.45)	59
Increase	SB	PCM	PCS	0.278	0.302	0.024	(1.34)	40
Increase	SB	PCM	MHHI Delta	0.334	0.361	0.027	(1.84)*	53
Increase	SB	PCM	C	0.343	0.322	-0.021	(-1.22)	33
Decrease	2SD	Markup	Density	1.106	1.105	-0.001	(-0.35)	552
Decrease	2SD	Markup	PCF	1.104	1.104	0.001	(0.22)	624
Decrease	2SD	Markup	PCS	1.121	1.121	-0.000	(-0.09)	612
Decrease	2SD	Markup	MHHI Delta	1.111	1.116	0.005	(1.46)	628
Decrease	2SD	Markup	C	1.101	1.103	0.003	(0.84)	577
Decrease	2SD	PCM	Density	0.306	0.305	-0.001	(-0.35)	552
Decrease	2SD	PCM	PCF	0.289	0.290	0.002	(0.48)	616
Decrease	2SD	PCM	PCS	0.305	0.307	0.003	(0.72)	609
Decrease	2SD	PCM	MHHI Delta	0.296	0.294	-0.001	(-0.38)	628
Decrease	2SD	PCM	C	0.281	0.287	0.006	(1.43)	575
Decrease	SB	Markup	Density	1.104	1.116	0.012	(1.44)	77
Decrease	SB	Markup	PCF	1.131	1.140	0.009	(0.99)	76
Decrease	SB	Markup	PCS	1.126	1.139	0.012	(1.32)	84
Decrease	SB	Markup	MHHI Delta	1.120	1.125	0.005	(0.53)	75
Decrease	SB	Markup	C	1.106	1.100	-0.005	(-0.45)	68
Decrease	SB	PCM	Density	0.280	0.305	0.025	(2.36)**	77
Decrease	SB	PCM	PCF	0.299	0.296	-0.003	(-0.24)	75
Decrease	SB	PCM	PCS	0.275	0.286	0.008	(0.85)	83
Decrease	SB	PCM	MHHI Delta	0.288	0.279	-0.008	(-0.99)	75
Decrease	SB	PCM	C	0.288	0.291	0.003	(0.22)	68

Table IA 27: Panel Regressions of Industries' Markups on Density using H&P-defined Industries

This table reports the results of multivariate OLS regressions explaining industry-level Markups with Density and controls for other aspects of institutional ownership and for differences in industry structure. All specifications include quarter fixed effects. Industry fixed effects are also included where indicated. Standard errors are robust to heteroscedasticity and clustered at the industry level. Variables are defined in Appendix A. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)
Density	-0.071	0.002	-0.006	0.000	-0.007
	(-1.097)	(0.154)	(-0.416)	(0.024)	(-0.466)
Off Degree (x 1,000)			-0.000		-0.000
			(-0.440)		(-0.539)
ln(Assets)			0.022***		0.027***
			(3.596)		(4.064)
1 / No. Firms			0.100*		0.104*
			(1.956)		(1.793)
HHI			-0.000***		-0.000***
			(-3.130)		(-3.612)
Firms with Blocks			0.025*		0.025
			(1.660)		(1.614)
Capital Intensity				-0.003*	-0.004***
				(-1.903)	(-2.752)
Sales Growth				-0.000***	-0.000***
				(-5.267)	(-5.413)
R&D Intensity				-1.018***	-0.768***
				(-4.128)	(-3.355)
R&D Missing				0.018	0.021*
				(1.522)	(1.682)
Leverage				0.002	-0.013
				(0.080)	(-0.599)
Quarter Effects	Y	Y	Y	Y	Y
Industry Effects	N	Y	Y	Y	Y
Observations	15,977	15,977	15,780	15,929	15,735
R^2	0.009	0.038	0.059	0.051	0.081
Industries		261	261	261	261

Table IA 28: Panel Regressions of Profitability on Institutional Common Ownership using H&P-defined Industries, Summary of Results

This table reports the results of multivariate OLS regressions explaining industry-level profitability with common ownership and controls for other aspects of institutional ownership and for differences in industry structure. The specification is the same as column 5 from Table **??**. All specifications include industry and quarter fixed effects. Standard errors are robust to heteroscedasticity and clustered at the industry level. Variables are defined in Appendix A. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

		Subsample	
Profitability	C.O.	Full	Concen-trated=1
		Coefficient	
Markup	Density	-0.007	0.057***
	PCF	0.003	0.072**
	PCS	-0.010	0.080**
	MHHI Delta	0.000	0.000
	C	0.014	0.024
PCM	Density	-0.018	0.038*
	PCF	0.002	0.033
	PCS	-0.003	0.057*
	MHHI Delta	0.000	0.000
	C	0.015	0.073*
		t**-statistic**	
Markup	Density	(-0.466)	(2.973)
	PCF	(0.157)	(2.108)
	PCS	(-0.393)	(2.331)
	MHHI Delta	(1.020)	(1.069)
	C	(0.934)	(1.044)
PCM	Density	(-1.152)	(1.758)
	PCF	(0.115)	(1.094)
	PCS	(-0.144)	(1.715)
	MHHI Delta	(0.854)	(1.617)
	C	(0.803)	(1.665)
		N	
Markup	Density	15,735	4,494
	PCF	15,735	4,494
	PCS	15,735	4,494
	MHHI Delta	15,735	4,494
	C	15,735	4,494
PCM	Density	15,718	4,488
	PCF	15,718	4,488
	PCS	15,718	4,488
	MHHI Delta	15,718	4,488
	C	15,718	4,488

Table IA 29: Difference-in-Difference Regressions of Industries' Markups on Institutional Common Ownership using H&P-defined Industries

This table presents results of difference-in-difference regressions. The sample includes 12 quarters prior to each merger announcement and 12 quarters after each merger is completed. The periods between announcement and completion are not included. Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is positive for that industry, zero otherwise. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
$Treat_{MHHIDelta}$*Post	0.004	0.006**	0.005**	0.007***	0.006***					
	(0.879)	(2.511)	(2.458)	(2.760)	(2.639)					
$Treat_{MHHIDelta}$	0.020									
	(1.483)									
$Treat_C$*Post						0.002	0.004	0.003	0.005*	0.003
						(0.534)	(1.551)	(1.329)	(1.780)	(1.485)
$Treat_C$						0.018				
						(1.421)				
Off Degree (x 1,000)			-0.391		-0.494			-0.384		-0.487
			(-0.784)		(-1.020)			(-0.770)		(-1.005)
ln(Assets)			0.019***		0.025***			0.019***		0.025***
			(3.034)		(3.657)			(3.038)		(3.661)
1 / No. Firms			0.095*		0.106*			0.095*		0.106*
			(1.824)		(1.879)			(1.821)		(1.874)
HHI			-0.042***		-0.050***			-0.042***		-0.050***
			(-3.022)		(-3.691)			(-3.020)		(-3.687)
Firms with Blocks			0.028**		0.028**			0.028**		0.028**
			(1.976)		(1.982)			(1.971)		(1.976)
Capital Intensity				-0.003**	-0.005***				-0.003**	-0.005***
				(-2.269)	(-3.188)				(-2.262)	(-3.182)
Sales Growth				-0.000***	-0.000***				-0.000***	-0.000***
				(-5.203)	(-5.249)				(-5.206)	(-5.262)
R&D Intensity				-0.802***	-0.603***				-0.802***	-0.603***
				(-3.835)	(-3.086)				(-3.832)	(-3.082)
R&D Missing				0.016	0.019*				0.016	0.019*
				(1.569)	(1.662)				(1.568)	(1.664)
Leverage				-0.004	-0.015				-0.004	-0.015
				(-0.172)	(-0.689)				(-0.175)	(-0.695)
Quarter Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Industry Effects		Y	Y	Y	Y		Y	Y	Y	Y
Observations	93,475	93,475	92,213	93,217	91,975	93,475	93,475	92,213	93,217	91,975
R²	0.008	0.038	0.055	0.052	0.078	0.008	0.038	0.054	0.051	0.077
Industries	261	261	261	261	261	261	261	261	261	261

Table IA 30: Difference-in-Difference Regressions of Industries' Markups on Institutional Common Ownership using H&P-defined Industries: Alternative Treatment Definitions

This table presents results of difference-in-difference regressions. The sample includes 12 quarters prior to each of the 48 institutional merger announcements and 12 quarters after each merger is completed. The periods between announcement and completion are not included. In the first four columns, Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is above the 90th percentile, zero otherwise. Columns 5 through 8 identify treated industries as those with implied changes above the 95th percentile. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

| | 90th | | | | 95th | | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\text{Treat}_{\text{MHHI Delta}}$*Post	-0.004	0.006*			0.001	0.010***		
	(-0.700)	(1.946)			(0.236)	(2.729)		
$\text{Treat}_{\text{MHHI Delta}}$	-0.003				-0.008			
	(-0.159)				(-0.481)			
Treat_{C}*Post			0.002	0.005			-0.009	0.005
			(0.350)	(1.462)			(-1.363)	(0.927)
Treat_{C}			0.009				0.001	
			(0.766)				(0.055)	
Off Degree (x 1,000)		-0.000		-0.000		-0.000		-0.000
		(-1.024)		(-0.975)		(-1.020)		(-0.991)
ln(Assets)		0.025***		0.025***		0.025***		0.025***
		(3.660)		(3.661)		(3.661)		(3.661)
1 / No. Firms		0.107*		0.105*		0.107*		0.106*
		(1.887)		(1.870)		(1.896)		(1.874)
HHI		-0.050***		-0.050***		-0.051***		-0.050***
		(-3.695)		(-3.692)		(-3.711)		(-3.691)
Firms with Blocks		0.028**		0.028**		0.028**		0.028**
		(1.977)		(1.971)		(1.977)		(1.971)
Capital Intensity		-0.005***		-0.005***		-0.005***		-0.005***
		(-3.182)		(-3.177)		(-3.180)		(-3.179)
Sales Growth		-0.000***		-0.000***		-0.000***		-0.000***
		(-5.249)		(-5.238)		(-5.248)		(-5.243)
R&D Intensity		-0.602***		-0.602***		-0.601***		-0.601***
		(-3.074)		(-3.079)		(-3.068)		(-3.071)
R&D Missing		0.019*		0.019*		0.019*		0.019*
		(1.662)		(1.669)		(1.665)		(1.665)
Leverage		-0.015		-0.015		-0.015		-0.015
		(-0.707)		(-0.698)		(-0.702)		(-0.703)
Quarter Effects	Y	Y	Y	Y	Y	Y	Y	Y
Industry Effects		Y		Y		Y		Y
Observations	93,475	91,975	93,475	91,975	93,475	91,975	93,475	91,975
R^2	0.007	0.078	0.007	0.077	0.007	0.078	0.007	0.077
Industries	261	261	261	261	261	261	261	261

Table IA 31: Difference-in-Difference Regressions of Industries' PCMs on Institutional Common Ownership using H&P-defined Industries: Alternative Treatment Definitions

This table presents results of difference-in-difference regressions. The sample includes 12 quarters prior to each of the 48 institutional merger announcements and 12 quarters after each merger is completed. The periods between announcement and completion are not included. In the first four columns, Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is above the 90th percentile, zero otherwise. Columns 5 through 8 identify treated industries as those with implied changes above the 95th percentile. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

| | 90th | | | | 95th | | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treat$_{\text{MHHI Delta}}$*Post	-0.003	0.004			0.007	0.009**		
	(-0.664)	(1.186)			(1.301)	(2.285)		
Treat$_{\text{MHHI Delta}}$	-0.009				-0.023			
	(-0.552)				(-1.126)			
Treat$_{\text{C}}$*Post			-0.002	0.002			-0.005	0.002
			(-0.420)	(0.693)			(-0.855)	(0.428)
Treat$_{\text{C}}$			0.004				-0.007	
			(0.616)				(-0.830)	
Off Degree (x 1,000)		-0.000		-0.000		-0.000		-0.000
		(-0.498)		(-0.471)		(-0.511)		(-0.474)
ln(Assets)		0.015***		0.015***		0.015***		0.015***
		(3.006)		(3.007)		(3.006)		(3.008)
1 / No. Firms		-0.009		-0.010		-0.008		-0.009
		(-0.166)		(-0.180)		(-0.153)		(-0.176)
HHI		-0.010		-0.010		-0.010		-0.010
		(-0.705)		(-0.705)		(-0.718)		(-0.704)
Firms with Blocks		0.009		0.009		0.009		0.009
		(0.532)		(0.529)		(0.532)		(0.528)
Capital Intensity		-0.003*		-0.003*		-0.003*		-0.003*
		(-1.789)		(-1.787)		(-1.787)		(-1.787)
Sales Growth		0.000***		0.000***		0.000***		0.000***
		(5.466)		(5.462)		(5.472)		(5.465)
R&D Intensity		-0.375		-0.376		-0.375		-0.375
		(-0.795)		(-0.796)		(-0.793)		(-0.794)
R&D Missing		0.001		0.001		0.001		0.001
		(0.122)		(0.127)		(0.123)		(0.125)
Leverage		-0.041**		-0.041**		-0.041**		-0.041**
		(-2.213)		(-2.206)		(-2.211)		(-2.210)
Quarter Effects	Y	Y	Y	Y	Y	Y	Y	Y
Industry Effects		Y		Y		Y		Y
Observations	93,193	91,883	93,193	91,883	93,193	91,883	93,193	91,883
R^2	0.013	0.042	0.013	0.042	0.014	0.043	0.013	0.042
Industries	261	261	261	261	261	261	261	261

Table IA 32: Difference-in-Difference Regressions of Industry Profitability on Institutional Common Ownership, Summary of Results using H&P-defined Industries

This table summarizes the coefficient of interest from difference-in-difference regressions for the full sample and various sub-samples. The specifications correspond to those in columns 5 and 10 from Table ??. The sample includes 12 quarters prior to each of the 48 merger announcements and 12 quarters after each merger is completed. The periods between announcement and completion are not included. Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is positive for that industry, zero otherwise. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively.

Profitability	C.O.	Full	Concen-trated=1
		Coefficient	
Markup	MHHI Delta	0.006***	0.003
	C	0.003	-0.003
PCM	MHHI Delta	0.006***	0.004
	C	0.004*	0.002
		t-statistic	
Markup	MHHI Delta	(2.639)	(0.670)
	C	(1.485)	(-0.674)
PCM	MHHI Delta	(2.626)	(0.550)
	C	(1.814)	(0.204)
		N	
Markup	MHHI Delta	91,975	27,160
	C	91,975	27,160
PCM	MHHI Delta	91,883	27,115
	C	91,883	27,115

Table IA 33: Difference-in-Difference Regressions of Industry Profitability on Institutional Common Ownership; Correspondence Between H&P Industry Definitions and Product Markets

This table summarizes the results from difference-in-difference regressions for various subsamples. The specifications correspond to those in columns 5 and 10 from Table ??. The sample includes 12 quarters prior to each of the 48 merger announcements and 12 quarters after each merger is completed. The periods between announcement and completion are not included. Treat is a dummy set to one if the implied change in common ownership (either MHHI Delta or C) is positive for that industry, zero otherwise. Post is a dummy set to one for the post-merger period. Variables are defined in Appendix A. Standard errors are clustered at the industry level. t-statistics are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level, respectively

	Geographic Overlap Not Missing	Geographic Overlap Decile Subsamples									
		Low	2	3	4	5	6	7	8	9	High
Panel A: Markups											
Treat$_{\text{MHHI Delta}}$*Post	0.005***	0.011**	0.003	0.001	0.001	0.003	0.005	0.005	-0.003	0.002	-0.007
t-statistic	(2.649)	(2.392)	(1.282)	(0.307)	(0.614)	(0.988)	(1.447)	(1.566)	(-0.527)	(0.518)	(-1.540)
Standard Error	0.002	0.005	0.003	0.003	0.002	0.003	0.003	0.003	0.005	0.003	0.005
R^2	0.070	0.311	0.199	0.135	0.119	0.131	0.125	0.231	0.223	0.232	0.102
Treat$_C$*Post	0.003	0.009**	0.005**	0.002	0.002	0.003	0.002	0.003	-0.003	0.001	-0.008
t-statistic	(1.508)	(2.606)	(2.429)	(0.822)	(0.863)	(1.072)	(0.664)	(0.781)	(-0.602)	(0.385)	(-1.232)
Standard Error	0.002	0.004	0.002	0.003	0.003	0.003	0.003	0.003	0.005	0.003	0.006
R^2	0.070	0.310	0.200	0.135	0.119	0.131	0.124	0.231	0.223	0.232	0.102
Observations	83,718	8,500	8,490	8,492	8,497	8,459	8,582	8,338	8,189	8,765	7,406
Industries	261	45	79	97	117	122	132	131	123	134	87
Panel B: PCMs											
Treat$_{\text{MHHI Delta}}$*Post	0.006***	0.015**	0.003	0.003	-0.003	-0.000	0.007	0.003	0.002	0.005	0.004
t-statistic	(2.636)	(2.664)	(0.932)	(1.156)	(-0.608)	(-0.160)	(1.279)	(1.108)	(0.434)	(0.852)	(0.761)
Standard Error	0.002	0.005	0.003	0.003	0.004	0.002	0.006	0.003	0.004	0.005	0.005
R^2	0.041	0.286	0.150	0.113	0.075	0.097	0.080	0.123	0.110	0.086	0.119
Treat$_C$*Post	0.004*	0.010***	0.004	0.002	-0.000	0.002	0.003	0.001	0.000	0.008	0.001
t-statistic	(1.910)	(2.774)	(1.364)	(1.022)	(-0.060)	(0.916)	(0.648)	(0.268)	(0.086)	(1.649)	(0.197)
Standard Error	0.002	0.003	0.003	0.002	0.005	0.002	0.004	0.003	0.005	0.005	0.005
R^2	0.041	0.284	0.150	0.113	0.075	0.097	0.080	0.123	0.110	0.086	0.119
Observations	83,645	8,500	8,490	8,492	8,497	8,445	8,582	8,324	8,175	8,758	7,382
Industries	261	45	79	97	117	122	132	131	123	134	87

IA.5. Industries with Significant Positive or Negative Relations

Table IA 34: Industries with Significant Positive or Negative Relations

This table lists the industries for which we frequently estimate a negative (left column) or positive (right column) statistically significant relationship between common ownership and profitability. For each industry, we run a time series regressions of profitability on common ownership and controls. We do this for each unique combination of profitability measure and common ownership measure, resulting in 2×5=10 regressions for each industry. This is done separately for NAICS-, SIC-, and H&P-defined industries. H&P industry classifications do not have accompanying descriptions so we use the the NAICS industry description that corresponds to the most firms in the H&P industry. The *Count* variable below reflects the number of estimates for an industry that are significant at the 5% level.

	Negative relation between common ownership and profitability			Positive relation between common ownership and profitability	
Industry	Description	Count	Industry	Description	Count
NAICS			**NAICS**		
4218	Machinery, equip. wholesalers	8	4812	Nonscheduled air transp.	9
3372	Office furniture manuf.	6	3341	Computer manufacturing	8
4861	Pipeline transp. of crude	6	5112	Software publishers	8
6244	Child day care Services	6	5223	Credit intermediation	7
8111	Automotive repair	6	5231	Securities and commodity contracts	7
8121	Personal care services	6	5614	Business support services	7
2372	Land subdivision	5	4862	Pipeline transp. of natural gas	6
3251	Basic chemical manuf.	5	5151	Radio and tv broadcasting	6
5311	Lessors of real estate	5	6222	Psychiatric hospitals	6
5415	Computer systems design	5	3119	Other food manuf.	5
5611	Office administrative services	5	3332	Industrial machinery manuf.	5
8129	Other personal services	5	3369	Other transp. equip.	5
			4811	Scheduled air transp.	5
			5133	Telecommunications	5
			5182	Data processing, hosting	5
			5621	Waste collection	5
			6114	Business schools, mgmt training	5
SIC			**SIC**		
508	Machinery, equip., and supplies	8	628	Exchange of securities	9
679	Miscellaneous investing	8	356	Industrial machinery	7
603	Savings institutions	7	360	Electronics	7
720	Personal services	7	800	Health services	7
874	Management and PR services	7	260	Paper and allied products	6
254	Office and store fixtures	6	351	Engines and turbines	6
153	Operative builders	5	357	Computer and office equip.	6
516	Chemicals and allied products	5	422	Warehousing, storage	6
207	Fats and Oils	4	732	Credit reporting agencies	6
243	Millwork, structural wood	4	104	Gold and silver ores	5
421	Trucking and courier services	4	381	Search, guidance, nav. systems	5
517	Petroleum and petroleum products	4	452	Nonscheduled air transp.	5
571	Home furniture	4	504	Commercial equipment	5
			621	Security brokers, dealers	5
			631	Life insurance	5
			734	Services to dwellings	5
			801	Doctors' offices	5
H&P			**H&P**		
20	Lessors of real estate	7	285	Restaurants and other eating places	6
46	Office furniture manuf.	7	28	Business support services	6
297	Support activities for mining	7	259	Household appliance manufacturing	5
39	Converted paper product manuf.	6	237	Advertising, public relations svcs.	5
294	Control instruments manuf.	6	198	Medical equip. manufacturing	5
8	Consumer goods rental	5	133	Computer systems design	5
56	Other food manuf.	5	84	Communications equip. manuf.	5
69	Screw, nut, and bolt manuf.	5			
248	Basic chemical manuf.	5			
258	Aerospace product manuf.	5			

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