

Internet Appendix for “Trade relationships, indirect economic links, and mergers”

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This appendix contains descriptive information about the sample as well as multiple tests that probe the robustness of the results reported in Table 3 of the paper.

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Table A.1 – Correlation among economic link variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Direct Link (Indicator)	1.00									
(2) Indirect Link (Indicator)	0.03	1.00								
(3) Acquirer Number of Customers	0.04	0.20	1.00							
(4) Target Number of Customers	0.08	0.13	0.07	1.00						
(5) Target is Rivals Customer (Indicator)	0.04	0.25	0.05	0.11	1.00					
(6) Rival is Targets Customer (Indicator)	0.11	0.23	0.12	0.14	0.09	1.00				
(7) Acquirer Number of Dependent Suppliers	0.09	0.12	0.00	0.04	0.16	0.06	1.00			
(8) Target Number of Dependent Suppliers	0.10	0.29	0.02	0.10	0.55	0.07	0.19	1.00		
(9) Acquirer Bridge Firm (Indicator)	0.06	0.14	0.46	0.06	0.08	0.09	0.32	0.07	1.00	
(10) Target Bridge Firm (Indicator)	-0.01	0.12	0.05	0.33	0.32	0.08	0.04	0.44	0.03	1.00

Table A.2 – Likelihood of being a merger participant as a function of individual variables

Panels A and B (C and D) relate to Table 3 Panel A (Panel B). Whereas Table 3 included firm- and industry-level controls in combination with the various economic link variables, this table focuses on each of the economic link variables individually with and without firm-level controls. The table reports the coefficients from a conditional logit regression where the dependent variable is set equal to 1 if a firm participated in a given deal as an acquirer (Panels A and B) or target (Panel C and D). The matched samples were created as described in Section 4.1. The independent variables refer to the acquirer’s economic links in Panel A and the target’s economic links in Panel B. Direct Link (Indirect Link) indicates that the target and acquirer are major trade partners (partners of trade partners). Number of Customers is $\ln(1+\text{the number of major customers at the firm})$. Number of Dependent Suppliers is $\ln(1+\text{the number of known suppliers})$. P-values are shown below the coefficients. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

Panel A: Likelihood of Being an Acquirer, No Firm Level Controls								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Number of Customers	0.053 (0.142)							
Direct Link		3.141*** (<0.001)						
Indirect Link			3.464*** (<0.001)					
Target is Rival’s Customer				2.455*** (<0.001)				
Rival is Target’s Customer					2.224*** (<0.001)			
Rivals						3.344*** (<0.001)		
Number of Dependent Suppliers							0.048* (0.050)	
Bridge Firm								0.453*** (<0.001)
Firm-Level Controls	No	No	No	No	No	No	No	No
Match Sample	All	All	All	All	All	All	All	All
Observations	23,622	23,622	23,622	23,622	23,622	23,622	23,622	23,622
Pseudo R-squared	<0.001	0.007	0.033	0.010	0.018	0.401	<0.001	0.003

Panel B: Likelihood of Being an Acquirer, Firm Level Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Number of Customers	0.036 (0.330)							
Direct Link		3.129*** (<0.001)						
Indirect Link			3.479*** (<0.001)					
Target is Rival's Customer				2.442*** (<0.001)				
Rival is Target's Customer					2.221*** (<0.001)			
Rivals						3.415*** (<0.001)		
Number of Dependent Suppliers							0.065** (0.017)	
Bridge Firm								0.450*** (<0.001)
Firm-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Match Sample	All	All	All	All	All	All	All	All
Observations	23,622	23,622	23,622	23,622	23,622	23,622	23,622	23,622
Pseudo R-squared	0.002	0.008	0.035	0.011	0.020	0.407	0.002	0.005

Panel C: Likelihood of Being a Target, No Firm Level Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Number of Customers	-0.986*** (<0.001)							
Direct Link		3.098*** (<0.001)						
Indirect Link			3.467*** (<0.001)					
Target is Rival's Customer				1.318*** (<0.001)				
Rival is Target's Customer					2.012*** (<0.001)			
Rivals						3.562*** (<0.001)		
Number of Dependent Suppliers							-0.448*** (<0.001)	
Bridge Firm								-0.569*** (0.007)
Firm-Level Controls	No	No	No	No	No	No	No	No
Match Sample	All	All	All	All	All	All	All	All
Observations	7,944	7,944	7,944	7,944	7,944	7,944	7,944	7,944
Pseudo R-squared	0.035	0.016	0.087	0.016	0.049	0.422	0.007	0.002

Panel D: Likelihood of Being a Target, Firm Level Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Number of Customers	-1.002*** (<0.001)							
Direct Link		3.097*** (<0.001)						
Indirect Link			3.507*** (<0.001)					
Target is Rival's Customer				1.410*** (<0.001)				
Rival is Target's Customer					2.013*** (<0.001)			
Rivals						3.624*** (<0.001)		
Number of Dependent Suppliers							-0.537*** (<0.001)	
Bridge Firm								-0.588*** (0.006)
Firm-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Match Sample	All	All	All	All	All	All	All	All
Observations	7,944	7,944	7,944	7,944	7,944	7,944	7,944	7,944
Pseudo R-squared	0.037	0.017	0.088	0.017	0.049	0.427	0.009	0.002

Table A.3 – Likelihood of merger participation as a function of important acquirer and target links to customers and suppliers

The firm-level control variables not tabulated in Table 3 of the main paper are tabulated below. Columns 3 and 6 below correspond directly with Table 3 Columns 3 and 6. The other columns report the coefficients from models that include only the firm-level controls (Columns 1 and 4) or drop all firm-level controls (Columns 2 and 5). The coefficients are from a conditional logit regression where the dependent variable is set equal to 1 if a firm participated in a given deal as an acquirer (Panel A) or target (Panel B). The matched samples of 5 pseudo-deals per actual deal were obtained by matching the 5 nearest neighbors by propensity score using control variables without restriction to industry (columns 1-3), or by matching randomly within the same year as described in Section 4.1. The independent variables refer to the acquirer's firm characteristics in Panel A and the target's firm characteristics in Panel B. Direct Link (Indirect Link) indicates that the target and acquirer are major trade partners (partners of trade partners). Number of Customers is $\ln(1+\text{the number of major customers at the firm})$. Number of Dependent Suppliers is $\ln(1+\text{the number of known suppliers})$. P-values are shown below the coefficients. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

Panel A: Likelihood of Being an Acquirer

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Firm-level economic link variables</i>						
Number of Customers		-0.191*** (0.001)	-0.212*** (<0.001)		-0.277*** (<0.001)	-0.116* (0.063)
Direct Link		1.965*** (<0.001)	1.978*** (<0.001)		4.796*** (<0.001)	5.483*** (<0.001)
Indirect Link		2.430*** (<0.001)	2.446*** (<0.001)		3.436*** (<0.001)	3.189*** (<0.001)
Target is Rival's Customer		1.347*** (0.004)	1.421*** (0.003)		1.656*** (0.002)	1.706** (0.012)
Rival is Target's Customer		1.389*** (<0.001)	1.422*** (<0.001)		1.150*** (<0.001)	1.163*** (<0.001)
Rivals		3.272*** (<0.001)	3.342*** (<0.001)		3.348*** (<0.001)	3.417*** (<0.001)
Number of Dependent Suppliers		0.048 (0.156)	0.024 (0.526)		0.897*** (<0.001)	-0.012 (0.822)
Bridge Firm		0.533*** (<0.001)	0.521*** (<0.001)		0.400*** (0.003)	0.171 (0.236)
<i>Firm-level Controls</i>						
Sales Growth	-0.009 (0.616)		-0.017 (0.513)	0.244*** (<0.001)		0.303*** (<0.001)
Net Working Capital	0.215* (0.075)		0.646*** (<0.001)	0.307** (0.019)		0.855*** (<0.001)
Leverage	-0.163** (0.012)		-0.292*** (0.001)	-0.932*** (<0.001)		-0.856*** (<0.001)
M/B	0.004 (0.204)		0.001 (0.842)	0.047*** (<0.001)		0.049*** (<0.001)
P/E	0.001 (0.130)		0.003*** (0.004)	0.002** (0.015)		0.001 (0.181)
Firm Size	0.014 (0.544)		0.044 (0.181)	0.503*** (<0.001)		0.524*** (<0.001)
Cash Deviation	0.012 (0.278)		0.001 (0.926)	-0.056*** (<0.001)		-0.043** (0.013)
Abnormal Returns	0.730 (0.943)		14.028 (0.313)	52.644*** (<0.001)		64.757*** (<0.001)
Mean Returns	-6.954		5.334	77.513***		132.905***

	(0.767)		(0.869)	(0.004)		(<0.001)
Standard Deviation of Returns	2.261		-9.358***	22.742***		8.589***
	(0.280)		(0.003)	(<0.001)		(0.007)
Economic Shock	0.089		1.262***	2.071		2.613
	(0.796)		(0.008)	(0.321)		(0.428)
Merger Wave	0.087*		-0.111	0.164***		-0.120
	(0.090)		(0.126)	(0.002)		(0.128)
Regulation	-0.031		-0.339	0.283		0.066
	(0.867)		(0.222)	(0.226)		(0.793)
Industry Concentration	-0.001		0.024***	-0.008**		0.018***
	(0.802)		(<0.001)	(0.034)		(<0.001)
Match Sample	All	All	All	Random	Random	Random
Observations	23,622	23,622	23,622	23,622	22,641	23,622
Pseudo R-squared	0.002	0.419	0.425	0.232	0.493	0.581

Panel B: Likelihood of Being a Target

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Firm-level economic link variables</i>						
Number of Customers		-1.295*** (<0.001)	-1.347*** (<0.001)		-1.466*** (<0.001)	-1.498*** (<0.001)
Direct Link		2.734*** (<0.001)	2.736*** (<0.001)		3.348*** (<0.001)	3.428*** (<0.001)
Indirect Link		3.032*** (<0.001)	2.995*** (<0.001)		3.269*** (<0.001)	3.187*** (<0.001)
Target is Rival's Customer		0.529 (0.100)	0.499 (0.113)		1.506*** (<0.001)	1.337*** (<0.001)
Rival is Target's Customer		1.247*** (<0.001)	1.267*** (<0.001)		1.510*** (<0.001)	1.483*** (<0.001)
Rivals		3.353*** (<0.001)	3.435*** (<0.001)		3.504*** (<0.001)	3.539*** (<0.001)
Number of Dependent Suppliers		-0.818*** (<0.001)	-0.867*** (<0.001)		-0.833*** (<0.001)	-1.110*** (<0.001)
Bridge Firm		0.253 (0.603)	0.254 (0.594)		0.543 (0.310)	0.618 (0.257)
<i>Firm-level Controls</i>						
Sales Growth	0.024 (0.501)		-0.007 (0.905)	0.087** (0.016)		0.049 (0.419)
Net Working Capital	0.024 (0.896)		0.566** (0.038)	0.187 (0.292)		0.579** (0.041)
Leverage	-0.045 (0.516)		-0.119 (0.194)	-0.224*** (0.001)		-0.319*** (0.002)
M/B	0.003 (0.687)		0.011 (0.247)	0.020*** (0.002)		0.022** (0.022)
P/E	0.001 (0.406)		-<0.001 (0.883)	0.006*** (<0.001)		0.004** (0.030)
Firm Size	0.011 (0.579)		0.038 (0.228)	0.155*** (<0.001)		0.173*** (<0.001)
Cash Deviation	-0.001 (0.961)		0.035 (0.193)	0.007 (0.698)		0.013 (0.581)
Abnormal Returns	5.349 (0.729)		27.649 (0.195)	-22.050 (0.138)		-13.971 (0.540)
Mean Returns	-12.177		-1.333	-1.253		47.184

	(0.798)		(0.985)	(0.978)		(0.491)
Standard Deviation of Returns	1.590		4.058	16.963***		13.582***
	(0.684)		(0.474)	(<0.001)		(0.010)
Economic Shock	0.703		0.964	-0.918		-1.311
	(0.459)		(0.417)	(0.367)		(0.150)
Merger Wave	-0.036		-0.193	0.326		-0.400
	(0.921)		(0.567)	(0.302)		(0.273)
Regulation	0.051		-0.235*	0.015		-0.159
	(0.569)		(0.073)	(0.865)		(0.210)
Industry Concentration	0.002		0.027***	-0.007		0.009
	(0.740)		(0.001)	(0.231)		(0.239)
Match Sample	All	All	All	Random	Random	Random
Observations	7,944	7,944	7,944	7,944	7,944	7,944
Pseudo R-squared	0.001	0.502	0.508	0.030	0.549	0.562

Table A.4 – Match evaluation using mean comparisons

The analysis in Table 3 of the main paper relies on matched and random samples. The matching process and the random sample are described in Section 4.1 of the paper. This table reports the mean values of matching variables and tests whether the means are different. Panel A (B) focuses on the acquirer (target) samples. As expected the differences between the sample of actual acquirers (targets) and the random samples are statistically different for almost all control variables. As expected all of the differences in means between the target and propensity matched sample are not statistically different from zero. Most of the difference in means between the acquirer and matched sample are also insignificantly different from zero. The few variables that remain significantly different between the acquirer and matched sample are included as controls in Table 3 in the main paper. In addition to explicitly controlling for these variables, it is important to note that the significant differences are small in magnitude relative to the differences reported in the randomly matched sample.

Panel A: Mean Comparison of Acquirer Sample

Match	Variable	Real Mean (N = 3,937)	Matched Mean (N=19,685)	Difference	p-value
Propensity (All)	Sales Growth	0.427	0.426	0.001	0.968
Propensity (All)	Net Working Capital	0.072	0.069	0.003	0.281
Propensity (All)	Leverage	0.242	0.265	-0.023***	0.001
Propensity (All)	M/B	4.655	4.487	0.168	0.106
Propensity (All)	P/E	48.912	47.980	0.932*	0.096
Propensity (All)	Firm Size	6.657	6.722	-0.065*	0.095
Propensity (All)	Cash Deviation	0.302	0.233	0.069**	0.024
Propensity (All)	Abnormal Returns	<0.001	<0.001	<0.001	0.874
Propensity (All)	Mean Returns	0.001	0.001	<0.001	0.706
Propensity (All)	Standard Deviation of Returns	0.054	0.053	<0.001	0.169
Propensity (All)	Economic Shock	-0.014	-0.015	<0.001	0.630
Propensity (All)	Merger Wave	0.249	0.239	0.010	0.184
Propensity (All)	Regulation	0.010	0.011	-0.001	0.532
Propensity (All)	Industry Concentration	5.933	5.986	-0.054	0.581
Random	Sales Growth	0.427	0.270	0.157***	<0.001
Random	Net Working Capital	0.072	0.090	-0.018***	<0.001
Random	Leverage	0.242	0.349	-0.107***	<0.001
Random	M/B	4.655	3.101	1.553***	<0.001
Random	P/E	48.912	54.741	-5.829***	<0.001
Random	Firm Size	6.657	4.980	1.677***	<0.001
Random	Cash Deviation	0.302	0.095	0.207***	<0.001
Random	Abnormal Returns	<0.001	<0.001	<0.001	0.416
Random	Mean Returns	0.001	0.001	<0.001***	<0.001
Random	Standard Deviation of Returns	0.054	0.052	0.002***	<0.001
Random	Economic Shock	-0.014	-0.015	0.001*	0.079
Random	Merger Wave	0.249	0.200	0.049***	<0.001
Random	Regulation	0.010	0.008	0.002	0.273
Random	Industry Concentration	5.933	6.303	-0.370***	0.001

Panel B: Mean Comparison of Target Sample

Match	Variable	Real Mean (N = 1,324)	Matched Mean (N=6,620)	Difference	p-value
Propensity (All)	Sales Growth	0.324	0.302	0.022	0.373
Propensity (All)	Net Working Capital	0.082	0.083	-0.002	0.754
Propensity (All)	Leverage	0.318	0.328	-0.009	0.533
Propensity (All)	M/B	3.704	3.619	0.085	0.590
Propensity (All)	P/E	57.503	56.518	0.985	0.333
Propensity (All)	Firm Size	5.276	5.305	-0.029	0.638
Propensity (All)	Cash Deviation	0.256	0.237	0.019	0.725
Propensity (All)	Abnormal Returns	<0.001	<0.001	<0.001	0.755
Propensity (All)	Mean Returns	0.001	0.001	<0.001	0.986
Propensity (All)	Standard Deviation of Returns	0.053	0.052	<0.001	0.696
Propensity (All)	Economic Shock	-0.015	-0.016	0.001	0.394
Propensity (All)	Merger Wave	0.211	0.206	0.005	0.673
Propensity (All)	Regulation	0.010	0.010	<0.001	0.920
Propensity (All)	Industry Concentration	5.980	5.957	0.024	0.888
Random	Sales Growth	0.324	0.246	0.078***	<0.001
Random	Net Working Capital	0.082	0.093	-0.012**	0.034
Random	Leverage	0.318	0.362	-0.043***	0.005
Random	M/B	3.704	3.060	0.644***	<0.001
Random	P/E	57.503	53.533	3.970***	<0.001
Random	Firm Size	5.276	4.975	0.301***	<0.001
Random	Cash Deviation	0.256	0.060	0.196***	0.001
Random	Abnormal Returns	<0.001	<0.001	<0.001**	0.022
Random	Mean Returns	0.001	0.001	<0.001	0.390
Random	Standard Deviation of Returns	0.053	0.051	0.002***	<0.001
Random	Economic Shock	-0.015	-0.016	<0.001	0.627
Random	Merger Wave	0.211	0.198	0.012	0.310
Random	Regulation	0.010	0.008	0.002	0.432
Random	Industry Concentration	5.980	6.336	-0.356*	0.052

Table A.5 – Likelihood of being a merger participant as a function of separating bilateral links or binary connection counts

The table below shows the coefficients from a fixed-effects (conditional) logit regression where an indicator variable is set equal to 1 if a firm participated in a given deal as an acquirer (columns 1-3) or target (columns 4-6). Direct Link (Indirect Link) indicates that the target and acquirer are major trade partners. Number of Customers is $\ln(1+\text{the number of major customers at the firm})$. Number of Dependent Suppliers is $\ln(1+\text{the number of known suppliers})$. Firm-level controls are included in all columns, but suppressed for brevity. Columns 1 and 4 performs separate analysis on the counts of connections and 2 and 5 performs separate analysis on direct and indirect connections. Columns 3 and 6 presents analysis with indicator variables instead of counts for the Number of Customers and Number of Dependent Suppliers. P-values are shown below the coefficients. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

	Acquirer			Target		
	(1)	(2)	(3)	(4)	(5)	(6)
Number of Customers	-0.090** (0.038)			-1.079*** (<0.001)		
Number of Customers > 0			-0.297*** (<0.001)			-1.135*** (<0.001)
Direct Link		2.009*** (<0.001)	1.985*** (<0.001)		2.412*** (<0.001)	2.716*** (<0.001)
Indirect Link		2.417*** (<0.001)	2.474*** (<0.001)		2.758*** (<0.001)	2.846*** (<0.001)
Target is Rival's Customer		1.413*** (0.002)	1.429*** (0.002)		-0.016 (0.957)	0.322 (0.278)
Rival is Target's Customer		1.418*** (<0.001)	1.425*** (<0.001)		0.928*** (<0.001)	1.305*** (<0.001)
Rivals		3.338*** (<0.001)	3.344*** (<0.001)		3.460*** (<0.001)	3.450*** (<0.001)
Number of Dependent Suppliers	0.024 (0.408)			-0.609*** (<0.001)		
Number of Dependent Suppliers > 0			-0.021 (0.775)			-1.473*** (<0.001)
Bridge Firm	0.517*** (<0.001)		0.611*** (<0.001)	0.784*** (0.001)		0.538 (0.301)
Firm-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Match Sample	All	All	All	All	All	All
Observations	23,622	23,622	23,622	7,944	7,944	7,944
Pseudo R-squared	0.005	0.423	0.425	0.046	0.468	0.508

Table A.6 – Likelihood of merger participation as a function of >10% acquirer and target links to customers and suppliers

The economic link variables used in Table 3 of the main paper incorporate all significant customer and supplier relations as reported by firms. In some cases the dollar value associated with each link is less than the 10% threshold or the dollar value is not disclosed. In this table we calculate the economic link variables only using the subset of links that are confirmed to be above the 10% threshold. The table below shows the coefficients from a fixed-effects (conditional) logit regression where an indicator variable is set equal to 1 if a firm participated in a given deal as an acquirer (columns 1-2) or target (columns 3-4), is regressed on the number of important customer/supplier relationships (restricted to only those listed as >10% of the supplier's sales) of the acquirer and target, as well as direct and indirect links between acquirer and target firms. The matched samples of 5 pseudo-deals per real deal were obtained by matching the 5 nearest neighbors by propensity score using control variables without restriction to industry (columns 1 and 3) and within 3-digit SIC industry (columns 2 and 4). P-values are shown below the coefficients. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

	Acquirer		Target	
	(1)	(2)	(3)	(4)
Number of Customers	-0.160** (0.019)	-0.104* (0.059)	-1.364*** (<0.001)	-1.401*** (<0.001)
Direct Link	14.766*** (<0.001)	2.528*** (0.003)	3.230* (0.086)	1.178* (0.069)
Indirect Link	1.922*** (0.009)	1.046*** (0.003)	2.735*** (<0.001)	1.171*** (<0.001)
Target is Rival's Customer	1.464*** (<0.001)		0.517* (0.071)	0.545*** (0.001)
Rival is Target's Customer	1.505*** (<0.001)		1.387*** (<0.001)	0.891*** (<0.001)
Rivals	3.371*** (<0.001)		3.513*** (<0.001)	
Number of Dependent Suppliers	0.060 (0.140)	0.262*** (<0.001)	-0.528*** (0.001)	-0.470*** (<0.001)
Bridge Firms	0.512*** (<0.001)	0.062 (0.543)	0.566 (0.299)	0.048 (0.878)
Firm-Level Controls	Yes	Yes	Yes	Yes
Match Sample	All	Industry	All	Industry
Observations	23,622	23,641	7,944	7,789
Pseudo R-squared	0.415	0.097	0.467	0.072

Table A.7– Likelihood of merger participation (board connections robustness test)

The table below shows the coefficients from a fixed-effects (conditional) logit regression where an indicator variable is set equal to 1 if a firm participated in a given deal as an acquirer (columns 1-4) or target (columns 5-8). Direct Link (Indirect Link) indicates that the target and acquirer are major trade partners (partners of trade partners). Number of Customers is $\ln(1+\text{the number of major customers at the firm})$. Number of Dependent Suppliers is $\ln(1+\text{the number of known suppliers})$. Firm-level controls are included in all columns, but suppressed for brevity. Although the analysis is similar to Table 3 in the main paper the sample is restricted to the subset of observations for which we can obtain board information from IRRC/Riskmetrics. This limits the sample to mainly S&P1500 firms from 1996-2009. Recent Board is an indicator variable equal to 1 if any directors of the acquiring firm's board were directors of the target firm's board in year t or $t-1$. P-values are shown below the coefficients. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

	Acquirer				Target			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Number of Customers	-0.011 (0.900)	-0.011 (0.904)	-0.033 (0.664)	-0.033 (0.662)	-1.732*** (<0.001)	-1.761*** (<0.001)	-1.866*** (<0.001)	-1.867*** (<0.001)
Direct Link	2.481*** (<0.001)	2.416*** (<0.001)	1.371*** (0.005)	1.327*** (0.004)	0.589 (0.451)	0.580 (0.458)	1.069 (0.113)	1.057 (0.117)
Indirect Link	2.180*** (<0.001)	2.192*** (<0.001)	1.684*** (<0.001)	1.693*** (<0.001)	3.587*** (<0.001)	3.602*** (<0.001)	1.917*** (<0.001)	1.929*** (<0.001)
Target is Rival's Customer	0.755 (0.197)	0.685 (0.238)			0.608 (0.193)	0.621 (0.177)	0.800*** (0.001)	0.803*** (0.001)
Rival is Target's Customer	0.744** (0.040)	0.709* (0.052)			1.094*** (0.005)	1.125*** (0.004)	1.027*** (<0.001)	1.017*** (<0.001)
Rivals	3.172*** (<0.001)	3.172*** (<0.001)			3.684*** (<0.001)	3.707*** (<0.001)		
Number of Dep. Suppliers	0.122** (0.012)	0.124** (0.011)	0.219*** (<0.001)	0.221*** (<0.001)	-0.958*** (0.001)	-0.957*** (0.001)	-0.920*** (<0.001)	-0.907*** (<0.001)
Bridge Firm	0.082 (0.539)	0.067 (0.618)	-0.121 (0.297)	-0.126 (0.277)	1.664*** (0.006)	1.643*** (0.007)	0.239 (0.581)	0.253 (0.558)
Recent Board		2.402*** (<0.001)		1.331*** (0.007)		1.405 (0.142)		0.701 (0.341)
Firm-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Match Sample	All	All	Industry	Industry	All	All	Industry	Industry
Observations	11,298	11,298	8,845	8,845	1,968	1,968	1,738	1,738
Pseudo R-squared	0.425	0.425	0.144	0.145	0.562	0.564	0.196	0.197

Table A.8 – Likelihood of merger participation (distance robustness test)

The table below shows the coefficients from a fixed-effects (conditional) logit regression where an indicator variable for whether a firm participated in a given deal as an acquirer (columns 1-2) or target (columns 3-4), is regressed on variables that account for the economic links at both the acquirer and target firms. Direct Link (Indirect Link) indicates that the target and acquirer are major trade partners (partners of trade partners). Number of Customers is $\ln(1+\text{the number of major customers at the firm})$. Number of Dependent Suppliers is $\ln(1+\text{the number of known suppliers})$. The analysis is performed on a restricted sample requiring zip code information from the SAS 9.2 zip code file Distance is the natural log of 1 + the number of miles between the acquirer and target headquarters' zip codes. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

	Acquirer		Target	
	(1)	(2)	(3)	(4)
<i>Firm-level economic link variables</i>				
Number of Customers	-0.400*** (<0.001)	-0.228*** (0.001)	-1.483*** (<0.001)	-1.713*** (<0.001)
Direct Link	1.036* (0.067)	1.234*** (0.006)	3.299*** (0.001)	2.220*** (<0.001)
Indirect Link	1.725*** (<0.001)	1.528*** (<0.001)	2.899*** (<0.001)	2.224*** (<0.001)
Target is Rival's Customer	1.481** (0.018)		0.870* (0.065)	0.770*** (0.009)
Rival is Target's Customer	1.543*** (<0.001)		1.207*** (<0.001)	0.781*** (<0.001)
Rivals	3.214*** (<0.001)		3.188*** (<0.001)	
Number of Dependent Suppliers	0.011 (0.851)	0.089 (0.179)	-1.074*** (<0.001)	-1.188*** (<0.001)
Bridge Firm	0.497*** (0.002)	-0.146 (0.306)	0.203 (0.754)	-0.217 (0.690)
Distance	-0.386*** (<0.001)	-0.343*** (<0.001)	-0.346*** (<0.001)	-0.246*** (<0.001)
Firm-Level Controls	Yes	Yes	Yes	Yes
Match Sample	All	Industry	All	Industry
Observations	11,964	12,751	3,732	3,758
Pseudo R-squared	0.472	0.195	0.563	0.209

Table A.9 – Likelihood of merger participation (joint-venture robustness test)

The table below shows the coefficients from a fixed-effects (conditional) logit regression where an indicator variable for whether a firm participated in a given deal as an acquirer (columns 1-2) or target (columns 3-4), is regressed on variables that account for the economic links at both the acquirer and target firms. Direct Link (Indirect Link) indicates that the target and acquirer are major trade partners (partners of trade partners). Number of Customers is $\ln(1+\text{the number of major customers at the firm})$. Number of Dependent Suppliers is $\ln(1+\text{the number of known suppliers})$. JV-Domestic Connection and JV-Foreign Connection is the natural log of 1 + the number of JV connection the firm has undertaken with domestic firms and foreign firms in the prior 5 years, respectively. P-values are shown below the coefficients. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

	Acquirer		Target	
	(1)	(2)	(3)	(4)
<i>Firm-level economic link variables</i>				
Number of Customers	-0.226*** (<0.001)	-0.112** (0.017)	-1.354*** (<0.001)	-1.533*** (<0.001)
Direct Link	1.964*** (<0.001)	1.828*** (<0.001)	2.677*** (<0.001)	2.285*** (<0.001)
Indirect Link	2.428*** (<0.001)	1.774*** (<0.001)	2.991*** (<0.001)	2.170*** (<0.001)
Target is Rival's Customer	1.479*** (0.002)		0.493 (0.117)	0.660*** (<0.001)
Rival is Target's Customer	1.443*** (<0.001)		1.282*** (<0.001)	0.904*** (<0.001)
Rivals	3.351*** (<0.001)		3.442*** (<0.001)	
Number of Dependent Suppliers	-0.046 (0.227)	0.135*** (0.002)	-0.899*** (<0.001)	-1.073*** (<0.001)
Bridge Firm	0.543*** (<0.001)	0.180** (0.040)	0.291 (0.540)	0.372 (0.218)
JV-Domestic Connection	0.390*** (<0.001)	0.262*** (<0.001)	0.346*** (0.004)	0.326*** (<0.001)
JV-Foreign Connection	-0.039 (0.413)	-0.055 (0.190)	-0.217* (0.079)	0.062 (0.515)
Firm-Level Controls	Yes	Yes	Yes	Yes
Match Sample	All	Industry	All	Industry
Observations	23,622	22,641	7,944	7,789
Pseudo R-squared	0.432	0.195	0.510	0.150

Table A.10 – Likelihood of merger participation (stable links robustness test)

The table below shows the coefficients from a fixed-effects (conditional) logit regression where an indicator variable for whether a firm participated in a given deal as an acquirer (columns 1-2) or target (columns 3-4), is regressed on variables that account for the economic links at both the acquirer and target firms. Direct Link (Indirect Link) indicates that the target and acquirer are major trade partners (partners of trade partners). Number of Customers is $\ln(1+\text{the number of major customers at the firm})$. Number of Dependent Suppliers is $\ln(1+\text{the number of known suppliers})$. The set of economic links used in the analysis is limited in this table to those that have been in place for at least 5 years. The matched samples of 5 pseudo-deals per real deal were obtained by matching the 5 nearest neighbors by propensity score using control variables without restriction to industry (columns 1 and 3) and within 3-digit SIC industry (columns 2 and 4). P-values are shown below the coefficients. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

	Acquirer		Target	
	(1)	(2)	(3)	(4)
<i>Firm-level economic link variables</i>				
Number of Customers	-0.230*** (0.001)	-0.161*** (0.002)	-1.816*** (<0.001)	-1.899*** (<0.001)
Direct Link	2.012*** (<0.001)	1.876*** (<0.001)	2.832*** (<0.001)	2.232*** (<0.001)
Indirect Link	2.461*** (<0.001)	1.805*** (<0.001)	2.939*** (<0.001)	2.100*** (<0.001)
Target is Rival's Customer	1.428*** (0.002)		0.199 (0.516)	0.243 (0.189)
Rival is Target's Customer	1.427*** (<0.001)		1.318*** (<0.001)	0.861*** (<0.001)
Rivals	3.342*** (<0.001)		3.457*** (<0.001)	
Number of Dependent Suppliers	-0.054 (0.195)	0.128*** (0.004)	-0.467*** (0.001)	-0.432*** (0.003)
Bridge Firm	0.512*** (<0.001)	0.182* (0.077)	0.793 (0.164)	0.790** (0.011)
Firm-Level Controls	Yes	Yes	Yes	Yes
Match Sample	All	Industry	All	Industry
Observations	23,622	22,641	7,944	7,789
Pseudo R-squared	0.424	0.108	0.504	0.131

Table A.11 – Likelihood of merger participation (government connections robustness test)

The table below shows the coefficients from a fixed-effects (conditional) logit regression where an indicator variable for whether a firm participated in a given deal as an acquirer (columns 1-2) or target (columns 3-4), is regressed on variables that account for the economic links at both the acquirer and target firms. Direct Link (Indirect Link) indicates that the target and acquirer are major trade partners (partners of trade partners). Number of Customers is $\ln(1+\text{the number of major customers at the firm})$. Number of Dependent Suppliers is $\ln(1+\text{the number of known suppliers})$. Number of Gov. Customers is the natural log of $1+\text{the number of large Government customers the firm lists in the year prior to the deal}$. The matched samples of 5 pseudo-deals per real deal were obtained by matching the 5 nearest neighbors by propensity score using control variables without restriction to industry (columns 1 and 3) and within 3-digit SIC industry (columns 2 and 4). P-values are shown below the coefficients. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

	Acquirer		Target	
	(1)	(2)	(3)	(4)
<i>Firm-level economic link variables</i>				
Number of Customers	-0.213*** (<0.001)	-0.103** (0.027)	-1.341*** (<0.001)	-1.522*** (<0.001)
Direct Link	1.989*** (<0.001)	1.847*** (<0.001)	2.696*** (<0.001)	2.283*** (<0.001)
Indirect Link	2.445*** (<0.001)	1.775*** (<0.001)	2.974*** (<0.001)	2.134*** (<0.001)
Target is Rival's Customer	1.429*** (0.002)		0.500 (0.113)	0.654*** (<0.001)
Rival is Target's Customer	1.424*** (<0.001)		1.251*** (<0.001)	0.900*** (<0.001)
Rivals	3.339*** (<0.001)		3.425*** (<0.001)	
Number of Dependent Suppliers	0.019 (0.619)	0.199*** (<0.001)	-0.847*** (<0.001)	-0.953*** (<0.001)
Bridge Firm	0.531*** (<0.001)	0.169** (0.049)	0.248 (0.601)	0.315 (0.294)
Number of Gov. Customers	0.190** (0.022)	0.124 (0.122)	-0.516* (0.062)	-0.937*** (<0.001)
Firm-Level Controls	Yes	Yes	Yes	Yes
Match Sample	All	Industry	All	Industry
Observations	23,622	22,641	7,944	7,789
Pseudo R-squared	0.425	0.110	0.509	0.151

Table A.12 – Likelihood of merger participation (unidentified connections robustness test)

The table below shows the coefficients from a fixed-effects (conditional) logit regression where an indicator variable for whether a firm participated in a given deal as an acquirer (columns 1-2) or target (columns 3-4), is regressed on variables that account for the economic links at both the acquirer and target firms. Direct Link (Indirect Link) indicates that the target and acquirer are major trade partners (partners of trade partners). Number of Customers is $\ln(1+\text{the number of major customers at the firm})$. Number of Dependent Suppliers is $\ln(1+\text{the number of known suppliers})$. Number of Unid. Customers is the natural log of $1+\text{the number of large unidentifiable corporate customers the firm lists in the year prior to the deal}$. The matched samples of 5 pseudo-deals per real deal were obtained by matching the 5 nearest neighbors by propensity score using control variables without restriction to industry (columns 1 and 3) and within 3-digit SIC industry (columns 2 and 4). P-values are shown below the coefficients. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

	Acquirer		Target	
	(1)	(2)	(3)	(4)
<i>Firm-level economic link variables</i>				
Number of Customers	-0.220*** (<0.001)	-0.117** (0.014)	-1.505*** (<0.001)	-1.705*** (<0.001)
Direct Link	1.953*** (<0.001)	1.822*** (<0.001)	2.821*** (<0.001)	2.344*** (<0.001)
Indirect Link	2.444*** (<0.001)	1.768*** (<0.001)	3.028*** (<0.001)	2.186*** (<0.001)
Target is Rival's Customer	1.419*** (0.003)		0.504 (0.108)	0.670*** (<0.001)
Rival is Target's Customer	1.437*** (<0.001)		1.210*** (<0.001)	0.845*** (<0.001)
Rivals	3.346*** (<0.001)		3.482*** (<0.001)	
Number of Dependent Suppliers	0.026 (0.492)	0.208*** (<0.001)	-0.862*** (<0.001)	-0.960*** (<0.001)
Bridge Firm	0.495*** (<0.001)	0.145* (0.095)	0.178 (0.726)	0.544* (0.069)
Number of Unid. Customers	-1.011*** (<0.001)	-0.920*** (<0.001)	-4.029*** (<0.001)	-4.653*** (<0.001)
Firm-Level Controls	Yes	Yes	Yes	Yes
Match Sample	All	Industry	All	Industry
Observations	23,622	22,641	7,944	7,789
Pseudo R-squared	0.426	0.111	0.528	0.180

Table A.13 – Likelihood of merger participation (returns correlation matching robustness test)

The table below shows the coefficients from a fixed-effects (conditional) logit regression where an indicator variable for whether a firm participated in a given deal as an acquirer (columns 1-2) or target (columns 3-4), is regressed on variables that account for the economic links at both the acquirer and target firms. Direct Link (Indirect Link) indicates that the target and acquirer are major trade partners (partners of trade partners). Number of Customers is $\ln(1+\text{the number of major customers at the firm})$. Number of Dependent Suppliers is $\ln(1+\text{the number of known suppliers})$. The matched sample of 5 pseudo-deals per real deal was obtained by matching the 5 nearest neighbors within a Fama-French 48 industry by stock return correlation over the previous year, therefore any variables without within Fama-French 48 variation are not included in these models. P-values are shown below the coefficients. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

	Acquirer (1)	Target (2)
<i>Firm-level economic link variables</i>		
Number of Customers	-0.162*** (0.001)	-2.033*** (<0.001)
Direct Link	2.175*** (<0.001)	2.221*** (<0.001)
Indirect Link	2.041*** (<0.001)	2.541*** (<0.001)
Target is Rival's Customer		0.959*** (<0.001)
Rival is Target's Customer		1.087*** (<0.001)
Number of Dependent Suppliers	0.162*** (<0.001)	-0.985*** (<0.001)
Bridge Firm	0.196** (0.029)	0.813** (0.015)
Firm-Level Controls	Yes	Yes
Match Sample	Ind./Corr	Ind./Corr
Observations	22,374	7,398
Pseudo R-squared	0.161	0.179

Table A.14 – Likelihood of merger participation (tabulating industry level measures from Table 3)

The table below shows the unreported coefficients of industry-level connection measures from Table 3, column 4 of Panel A and Panel B from the main paper. The variables are the number of upstream or downstream industries (as defined by the 1992 BEA release) that exceed 1% of a given industries sales, the number of important customer/supplier relationships of the acquirer and target, as well as direct and indirect links between acquirer and target industries and firms using the industry-level data. The reported coefficients are from a fixed-effects (conditional) logit regression where an indicator variable is set equal to 1 if a firm participated in a given deal as an acquirer (columns 3) or target (column 6). P-values are shown below the coefficients. Significance at the 1, 5 and 10% levels are indicated with ***, **, and *, respectively.

	Acquirer Panel A (4)	Target Panel B (4)
<i>Industry-level economic link variables</i>		
Upstream Industries	0.191*** (<0.001)	0.187*** (0.002)
Downstream Industries	0.026 (0.596)	0.229*** (0.005)
Betweenness Industry	-0.105*** (<0.001)	-0.112*** (0.001)
Acquirer Industry Downstream	0.685*** (<0.001)	0.640*** (<0.001)
Target Industry Downstream	1.153*** (<0.001)	1.021*** (<0.001)
Common Upstream Industry	-0.382*** (<0.001)	-0.224** (0.034)
Common Downstream Industry	0.143** (0.033)	0.072 0.187***

Table A.15 – Comparison of characteristics of targeted and not targeted firms by those that report a customer and those that do not

The table below shows summary statistics comparing firm-level controls of firms targeted in acquisitions that also report (do not report) an important customer and firms not targeted in acquisitions that also report (do not report) an important customer over the sample period. It also tabulates the differences between the means of variables for firms that report a customer and firms that do not report a customer, the difference of these differences (DiD), and their respective p-values. Differences marked with *, **, and *** are significant at the 10%, 5%, and 1% levels, respectively. All variables are as defined in Appendix A and used in Table 3.

	Reports Customer				No Reported Customer				DiD	p-value
	Target Mean	Non-Target Mean	Difference	p-value	Target Mean	Non-Target Mean	Difference	p-value		
Sales Growth	0.359	0.261	0.097	0.151	0.320	0.264	0.057**	0.013	0.041	0.654
Net Working Capital	0.100	0.110	-0.010	0.559	0.080	0.084	-0.005	0.410	-0.005	0.753
Leverage	0.304	0.321	-0.017	0.698	0.320	0.387	-0.067***	<0.001	0.050	0.202
M/B	4.285	3.213	1.072**	0.016	3.624	2.950	0.674***	<0.001	0.398	0.511
P/E	55.785	56.229	-0.444	0.887	57.710	53.108	4.602***	<0.001	-5.045*	0.086
Firm Size	5.426	4.644	0.782***	<0.001	5.262	5.067	0.195***	0.002	0.587***	0.003
Cash Deviation	-0.006	0.210	-0.217	0.216	0.282	0.065	0.217***	<0.001	-0.434**	0.025
Abnormal Returns	<0.001	<0.001	<0.001	0.846	<0.001	<0.001	<0.001***	0.003	<0.001	0.493
Mean Returns	0.001	0.001	<0.001	0.463	0.001	0.001	<0.001***	<0.001	<0.001	0.203
Standard Deviation of Returns	0.053	0.052	0.001	0.387	0.053	0.053	<0.001	0.962	0.001	0.403
Economic Shock	-0.016	-0.015	-0.001	0.750	-0.015	-0.016	0.001	0.626	-0.002*	0.052
Merger Wave	0.124	0.130	-0.006	0.840	0.220	0.157	0.062***	<0.001	-0.069**	0.034
Regulation	0.008	0.012	-0.004	0.718	0.009	0.009	0.000	0.992	-0.004	0.682
Industry Concentration	669.310	713.352	-44.042	0.516	591.190	632.448	-41.258**	0.016	-2.784	0.965