Shopping for Information? Diversification and the Network of Industries

ONLINE APPENDIX

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The online appendix contains additional details and robustness checks for the results presented in the main paper. The appendix is organized as follows:

- **Section OA.1: Illustration of 2-segment conglomerates.** We select three conglomerates that are illustrative of low, average, and high excess centrality, and depict them in the industry network shown in the main text.
- **Section OA.2: Tables mentioned in section 3 of main text.** Table OA.1 tabulates excess centrality by number of segments.
- **Section OA.3: Tables mentioned in section 4 of main text.** Table OA.2 shows the innovation results using alternative specifications. Table OA.3 shows the effect on innovation of interacting excess centrality with the market share of single-segment firms.
- **Section OA.4: Tables mentioned in section 5.1 of main text.** Table OA.4 performs the core-periphery analysis using degree and eigenvector centrality (the main specification uses closeness centrality).
- **Section OA.5: Full regression outputs for table 11 in the main text.** Tables OA.5 and OA.6 show the results when we consider only segments with a minimum relative size threshold of 5% and 10%. In table OA.7 we use the maximum of the flows between two industries, instead of the average. Table OA.8 uses industry-to-commodity flows, rather than the average of industry-to-commodity and commodity-to-industry flows. The network is disconnected when using only commodity-to-industry flows, therefore we cannot replicate our analysis using this approach to flow construction. Table OA.9 uses flows that are scaled by the total industry flow. In Table OA.10 we use the 2002 network instead of the 1997 network. Table OA.11 shows the results using equal-weighted excess centrality, where we weight equally each division's centrality in the benchmark portfolio. Tables OA.12 and OA.13 construct excess centrality using sales or capex weights (instead of the assets weights in the main specification). In

table OA.14 we use a measure of excess value adjusted for goodwill, in light of the results presented in Custódio (2013). In table OA.15 we only include conglomerates whose total assets stated in Compustat Segments differ at most by 5% from the total assets stated in Compustat Fundamentals. In table OA.16 we only include industries with at least 5 specialized firms. Table OA.17 uses the same financial controls as in Berger and Ofek (1995), without the industry adjustment recommended by Gormley and Matsa (2014). The industry network in Table OA.18 excludes the broad and generic industries of retail and wholesale trade. Similar analyses are performed in tables OA.19 and OA.20, which exclude the broad industry of professional, scientific, and technical services. Tables OA.21 and OA.22 exclude from the sample conglomerates that participate in highly concentrated industries. Table OA.23 excludes from the sample conglomerates where acquisitions are more than 5% of total assets. Tables OA.24 and OA.25 include controls for systematic risk.

- **Section OA.6: Additional tables.** Table OA.26 excludes from the sample conglomerates that participate in highly concentrated industries, in the context of the time-varying network analysis (3-digit Input-Output Classification).

OA.1 Illustration of 2-segment conglomerates

Figure OA.1 illustrates the network position of three different conglomerates, each representing a particular network strategy (for the year 1998). For visualization purposes we use the 3-digit I-O classification (61 industries), as well as unweighted links. Also, all three conglomerates have two segments and similar weight on both segments, for comparability. The squares stand for Tosco Corp., with about 60% of assets in industry 24 (petroleum and coal products), and the remainder in industry 27 (wholesale trade). Tosco Corp. in 1998 had an excess centrality of 0.22, very close to the unconditional average of 0.21 in our sample, and in that sense is a representative conglomerate.

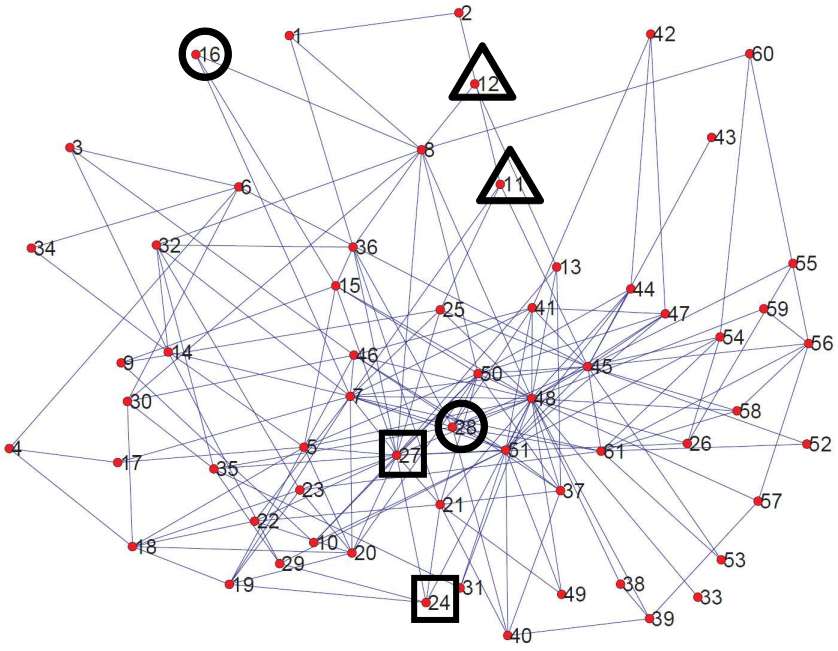

Figure OA.1: The figure shows the industry network using the 3-digit Input-Output Tables Industry Classification system level and the network positions of three illustrate firms: Chicago Rivet and Machine Co. (triangles); Tosco Corp. (squares), and New Dover Capital Corp. (circles). For visualization purposes, we use unweighted links.

The triangles in figure OA.1 stand for Chicago Rivet and Machine Co., with 57% of assets in industry 11 (fabricated metal products) and 43% in industry 12 (machinery). This company has an excess centrality of about 0.1 in 1998, i.e., a difference of about -0.12 with respect to Tosco Co. This difference corresponds to a one standard deviation less in excess centrality, and the figure shows how Chicago Rivet and Machine Co. participates in two peripheral segments; according to our interpretation, this compromises the firm's ability to generate informational advantages, even if the segments are distant from one another, since neither industry is a source of much information. Finally, the circles stand for New Dover

Capital Corp., which participates in industry 16 (other transportation equipment, weight of 64%) and industry 28 (retail trade, weight of 36%), and has an excess centrality of 0.31, which is roughly one standard deviation above the representative conglomerate (Tosco). New Dover Capital Corp. participates in both core and peripheral segments, which generates high excess centrality. According to our interpretation, this company is able to use information and knowledge retrieved from its experience in a core industry (retail trade) and use it to leverage its more peripheral operation (other transportation equipment).

OA.2 Tables mentioned in section 3 of main text

Table OA.1: Excess Centrality and Number of Segments. The table shows the summary statistics of Excess Centrality by number of segments. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the closeness centrality of a similar portfolio of specialized firms.

	Excess Centrality				
	N. Obs.	Mean	St. Dev.	Min.	Max
N. Segments = 2	12902	.1238904	.1676684	.0023125	2.047042
N. Segments = 3	6170	.1721918	.1688399	.0042819	1.408244
N. Segments = 4	2203	.1869264	.1619027	.0119872	1.140551
N. Segments = 5	757	.2143869	.1565779	.0192411	1.118092
N. Segments = 6	273	.2473047	.1504988	.034346	.7116544
N. Segments = 7	80	.2076739	.108413	.060025	.4539677
N. Segments = 8	21	.2709784	.1104583	.0902688	.4532065
N. Segments = 9	11	.3356288	.1445444	.1007202	.4711348
N. Segments = 10	8	.2597189	.110921	.108565	.4363432

	Excess Centrality Standard Deviation
Overall Standard Deviation	.1694655
Within-Firm Standard Deviation	.0504406
Between-Firm Standard Deviation	.1580385

OA.3 Tables mentioned in section 4 of main text

Table OA.2: Excess Innovation and Excess Centrality in Conglomerates: Robustness Checks. In the odd- (even-) numbered specifications, the dependent variable is Excess Patents (Citations), defined as the log-difference between the number of patents (citations) produced by a conglomerate and the number of patents (citations) produced by a similar portfolio of specialized firms, scaled by total assets. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included in each specification but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	Not Winsorized		1% Truncation		Norm. Ind. Flows		Assets Match		Min. 5% Segm. Size	
	Patents	Cites	Patents	Cites	Patents	Cites	Patents	Cites	Patents	Cites
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Excess Centrality	0.745***	0.777***	0.468**	0.530**	0.916	1.547**	0.961***	1.190***	0.728***	0.767***
	0.065	0.062	0.046	0.047	0.048	0.074	0.080	0.092	0.065	0.062
	(2.85)	(2.62)	(1.99)	(2.05)	(1.41)	(2.09)	(2.60)	(2.93)	(2.78)	(2.76)
N. of Segments	-0.094	-0.121*	-0.104*	-0.153**	-0.133*	-0.203**	-0.011	0.001	-0.123*	-0.186**
	-0.050	-0.060	-0.063	-0.084	-0.074	-0.106	-0.005	0.000	-0.061	-0.085
	(-1.58)	(-1.72)	(-1.95)	(-2.46)	(-1.89)	(-2.46)	(-0.13)	(0.01)	(-1.90)	(-2.44)
Related Segments	-0.159*	-0.151	-0.099	-0.047	-0.115	-0.090	-0.307***	-0.365***	-0.139*	-0.121
	-0.059	-0.051	-0.041	-0.018	-0.044	-0.032	-0.106	-0.119	-0.051	-0.040
	(-1.93)	(-1.55)	(-1.35)	(-0.55)	(-1.41)	(-0.96)	(-2.72)	(-2.92)	(-1.67)	(-1.24)
Vert. Relatedness	-0.001**	-0.001	-0.001**	-0.000	-0.002	-0.001	-0.001	-0.001	-0.001**	-0.001
	-0.053	-0.041	-0.053	-0.026	-0.035	-0.018	-0.055	-0.040	-0.058	-0.041
	(-2.21)	(-1.37)	(-1.97)	(-0.85)	(-1.28)	(-0.58)	(-1.38)	(-0.80)	(-2.17)	(-1.25)
Excess Assets	-0.251***	-0.219***	-0.211***	-0.186***	-0.241***	-0.209***	-0.251***	-0.239***	-0.233***	-0.208***
	-0.239	-0.187	-0.227	-0.177	-0.239	-0.186	-0.240	-0.209	-0.230	-0.184
	(-9.28)	(-7.32)	(-8.65)	(-6.74)	(-9.27)	(-7.20)	(-7.49)	(-6.19)	(-8.99)	(-6.96)
Excess EBIT/Sales	-0.011	-0.029***	-0.010	-0.026***	-0.011	-0.029***	-0.005	-0.020	-0.023**	-0.036***
	-0.052	-0.085	-0.052	-0.086	-0.054	-0.087	-0.029	-0.064	-0.086	-0.102
	(-1.44)	(-3.36)	(-1.37)	(-3.24)	(-1.45)	(-3.34)	(-0.81)	(-1.61)	(-2.11)	(-4.11)
Excess Capex/Sales	0.035	0.029	0.027	0.014	0.039	0.032	0.005	-0.041	0.009	0.009
	0.032	0.022	0.026	0.012	0.037	0.026	0.005	-0.031	0.009	0.007
	(1.27)	(0.81)	(1.04)	(0.42)	(1.47)	(0.95)	(0.15)	(-0.64)	(0.34)	(0.26)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.112	0.090	0.097	0.079	0.108	0.089	0.108	0.103	0.114	0.093
N. of Observations	4,172	3,635	4,080	3,564	4,172	3,635	2,177	1,743	3,965	3,467

Table OA.3: Excess Innovation and Excess Centrality: Industry Composition. In the first (last) four specifications, the dependent variable is Excess Patents (Citations), defined as the log-difference between the number of patents (citations) produced by a conglomerate and the number of patents (citations) produced by a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included in each specification but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	Excess Patents				Excess Citations			
	Scaled by Assets		Scaled by R&D		Scaled by Assets		Scaled by R&D	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Excess Centrality	0.536**	1.012**	0.442	0.902*	0.534*	0.847*	0.377	0.961*
	0.048	0.091	0.044	0.089	0.044	0.070	0.035	0.088
	(2.15)	(2.36)	(1.60)	(1.81)	(1.96)	(1.88)	(1.28)	(1.90)
Mkt. Share SS	-1.632***	-1.305***	-1.821***	-1.501***	-1.740***	-1.526***	-1.857***	-1.458***
	-0.150	-0.120	-0.184	-0.151	-0.144	-0.126	-0.173	-0.136
	(-5.74)	(-3.63)	(-5.98)	(-3.79)	(-5.37)	(-3.72)	(-5.66)	(-3.49)
Exc. Cent. * Mkt. Share SS		-1.793		-1.782		-1.178		-2.281
		-0.059		-0.062		-0.035		-0.073
		(-1.38)		(-1.19)		(-0.88)		(-1.59)
N. of Segments	-0.091	-0.090	-0.093	-0.092	-0.121*	-0.121*	-0.113*	-0.111*
	-0.050	-0.050	-0.057	-0.056	-0.063	-0.063	-0.066	-0.064
	(-1.60)	(-1.60)	(-1.52)	(-1.51)	(-1.83)	(-1.83)	(-1.67)	(-1.66)
Related Segments	-0.156**	-0.157**	-0.192**	-0.193**	-0.141	-0.142	-0.173*	-0.175*
	-0.060	-0.060	-0.084	-0.084	-0.050	-0.050	-0.071	-0.072
	(-1.99)	(-2.01)	(-2.39)	(-2.41)	(-1.56)	(-1.57)	(-1.86)	(-1.89)
Vert. Relatedness	-0.001**	-0.001**	-0.000	-0.000	-0.001	-0.001	-0.000	-0.000
	-0.060	-0.059	-0.001	-0.000	-0.046	-0.046	-0.006	-0.005
	(-2.43)	(-2.39)	(-0.02)	(-0.00)	(-1.52)	(-1.50)	(-0.16)	(-0.15)
Excess Assets	-0.303***	-0.305***	-0.250***	-0.252***	-0.277***	-0.278***	-0.222***	-0.224***
	-0.300	-0.302	-0.278	-0.280	-0.246	-0.247	-0.225	-0.228
	(-10.79)	(-10.88)	(-8.46)	(-8.58)	(-8.87)	(-8.93)	(-7.03)	(-7.14)
Excess EBIT/Sales	-0.009	-0.009	0.003	0.003	-0.022***	-0.023***	-0.009	-0.009
	-0.042	-0.043	0.016	0.016	-0.068	-0.069	-0.032	-0.032
	(-1.34)	(-1.34)	(0.72)	(0.70)	(-2.87)	(-2.88)	(-1.01)	(-1.01)
Excess Capex/Sales	0.030	0.030	0.072*	0.074*	0.029	0.029	0.059	0.061
	0.029	0.029	0.050	0.051	0.023	0.023	0.037	0.038
	(1.21)	(1.21)	(1.89)	(1.92)	(0.86)	(0.86)	(1.20)	(1.24)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.130	0.131	0.113	0.114	0.106	0.107	0.107	0.108
N. of Observations	4,172	4,172	3,159	3,159	3,635	3,635	2,774	2,774

OA.4 Tables mentioned in section 5.1 of main text

Table OA.4: Excess Value and Core-Periphery Strategies using Degree and Eigenvector Centrality. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Core-Periphery is a dummy variable equal to 1 if the firm simultaneously participates in core and peripheral segments. Core and peripheral segments are defined using the 75th and 25th percentile of Degree Centrality (columns 1 to 3) and of Eigenvector Centrality (columns 4 to 6). All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	Using Degree Centrality			Using Eigenvector Centrality		
	(1)	(2)	(3)	(4)	(5)	(6)
Core-Periphery	0.072**	0.072**	0.074**	0.096***	0.098***	0.098***
	0.031	0.030	0.031	0.042	0.043	0.043
	(2.14)	(2.08)	(2.14)	(2.89)	(2.81)	(2.79)
N. of Segments		-0.023**	-0.031***		-0.025**	-0.033***
		-0.033	-0.045		-0.036	-0.048
		(-2.19)	(-2.83)		(-2.37)	(-2.98)
Related Segments		0.039**	0.031*		0.039**	0.031*
		0.039	0.031		0.038	0.030
		(2.13)	(1.72)		(2.09)	(1.69)
Vert. Relatedness		-0.000**	-0.000***		-0.000**	-0.000**
		-0.026	-0.029		-0.025	-0.028
		(-2.48)	(-2.61)		(-2.42)	(-2.56)
Excess Assets			0.018***			0.017***
			0.061			0.061
			(3.06)			(3.03)
Excess EBIT/Sales			-0.005***			-0.005***
			-0.091			-0.091
			(-9.21)			(-9.20)
Excess Capex/Sales			0.002***			0.002***
			0.015			0.015
			(2.93)			(2.93)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.014	0.017	0.029	0.015	0.018	0.030
N. of Observations	22,425	22,425	21,516	22,425	22,425	21,516

OA.5 Full regression outputs for table 11 in the main text

Table OA.5: Excess Value and Excess Centrality: Min. 5% Segment Size. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. Only segments larger than 5% of a conglomerate's total assets are considered in the analysis. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality	0.389***	0.391***	0.372***	0.274***
	0.098	0.099	0.094	0.069
	(5.41)	(5.18)	(4.90)	(3.01)
N. of Segments		-0.030**	-0.037***	-0.046***
		-0.039	-0.048	-0.060
		(-2.48)	(-2.92)	(-3.93)
Related Segments		0.050**	0.047**	0.022
		0.049	0.047	0.022
		(2.50)	(2.43)	(1.08)
Vert. Relatedness		-0.000	-0.000	-0.000
		-0.006	-0.008	-0.004
		(-0.53)	(-0.65)	(-0.09)
Excess Assets			0.011*	-0.029***
			0.039	-0.102
			(1.95)	(-2.76)
Excess EBIT/Sales			-0.006***	-0.001***
			-0.097	-0.025
			(-9.19)	(-3.28)
Excess Capex/Sales			0.001	0.003***
			0.009	0.022
			(1.63)	(6.38)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.024	0.026	0.038	0.027
N. of Observations	19,935	19,935	19,125	19,125

Table OA.6: Excess Value and Excess Centrality: Min. 10% Segment Size. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. Only segments larger than 10% of a conglomerate's total assets are considered in the analysis. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality	0.392***	0.392***	0.380***	0.206**
	0.095	0.095	0.093	0.050
	(4.78)	(4.55)	(4.39)	(2.12)
N. of Segments		-0.014	-0.024	-0.041***
		-0.014	-0.025	-0.043
		(-0.87)	(-1.46)	(-2.96)
Related Segments		0.055**	0.050**	0.003
		0.049	0.045	0.002
		(2.33)	(2.22)	(0.11)
Vert. Relatedness		0.000	0.000	-0.000
		0.009	0.008	-0.032
		(0.77)	(0.63)	(-0.57)
Excess Assets			0.012**	-0.020*
			0.045	-0.072
			(2.04)	(-1.74)
Excess EBIT/Sales			-0.007***	-0.002***
			-0.103	-0.027
			(-8.68)	(-3.58)
Excess Capex/Sales			-0.000	0.003***
			-0.000	0.013
			(-0.05)	(2.83)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.025	0.027	0.039	0.024
N. of Observations	17,182	17,182	16,470	16,470

Table OA.7: Excess Value and Excess Centrality: Max of Industry Flows. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network using the maximum of commodity flows between two industries. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Ex. Centrality (Max. of Industry Flows)	0.379***	0.387***	0.361***	0.277***
	0.098	0.100	0.093	0.071
	(5.80)	(5.67)	(5.29)	(2.63)
N. of Segments		-0.031***	-0.037***	-0.039***
		-0.045	-0.055	-0.058
		(-2.98)	(-3.42)	(-3.56)
Related Segments		0.038**	0.031*	0.004
		0.038	0.031	0.004
		(2.09)	(1.75)	(0.22)
Vert. Relatedness (Max. of Industry Flows)		-0.000	-0.000	0.000
		-0.008	-0.012	0.006
		(-0.74)	(-1.06)	(0.17)
Excess Assets			0.015***	-0.016
			0.054	-0.054
			(2.70)	(-1.38)
Excess EBIT/Sales			-0.005***	-0.001***
			-0.089	-0.026
			(-8.94)	(-2.67)
Excess Capex/Sales			0.001**	0.003***
			0.013	0.029
			(2.57)	(8.66)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.023	0.025	0.036	0.026
N. of Observations	22,425	22,425	21,516	21,516

Table OA.8: Excess Value and Excess Centrality: Industry-to-Commodity Flows. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output industry-to-commodity flows. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Ex. Centrality (Industry-to-Comm.)	0.465***	0.464***	0.444***	0.340***
	0.123	0.123	0.118	0.091
	(6.30)	(6.11)	(5.78)	(3.41)
N. of Segments		-0.031***	-0.037***	-0.038***
		-0.045	-0.055	-0.056
		(-3.09)	(-3.52)	(-3.57)
Related Segments		0.038**	0.032*	0.003
		0.037	0.032	0.003
		(2.12)	(1.83)	(0.16)
Vert. Relatedness (Industry-to-Comm.)		-0.000	-0.000	-0.000
		-0.020	-0.019	-0.022
		(-1.52)	(-1.44)	(-0.62)
Excess Assets			0.014**	-0.016
			0.050	-0.055
			(2.55)	(-1.44)
Excess EBIT/Sales			-0.005***	-0.001***
			-0.087	-0.026
			(-8.84)	(-2.64)
Excess Capex/Sales			0.001***	0.003***
			0.014	0.029
			(2.76)	(8.57)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.029	0.031	0.042	0.027
N. of Observations	22,425	22,425	21,516	21,516

Table OA.9: Excess Value and Excess Centrality: Normalized Industry Flows. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network with normalized industry flows. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality	0.206**	0.345***	0.311***	0.432**
	0.034	0.057	0.052	0.072
	(2.32)	(3.28)	(2.96)	(2.54)
N. of Segments		-0.041***	-0.046***	-0.054***
		-0.060	-0.068	-0.079
		(-3.45)	(-3.75)	(-3.82)
Related Segments		0.051***	0.043**	0.010
		0.050	0.042	0.010
		(2.70)	(2.32)	(0.51)
Vert. Relatedness		0.000	0.000	0.001**
		0.013	0.007	0.051
		(1.14)	(0.62)	(2.12)
Excess Assets			0.017***	-0.015
			0.057	-0.052
			(2.86)	(-1.35)
Excess EBIT/Sales			-0.005***	-0.001***
			-0.091	-0.026
			(-9.15)	(-2.71)
Excess Capex/Sales			0.002***	0.003***
			0.015	0.029
			(3.01)	(8.66)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.015	0.017	0.029	0.026
N. of Observations	22,425	22,425	21,516	21,516

Table OA.10: Excess Value and Excess Centrality: 2002 I-O Network. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 2002 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality (2002)	0.296***	0.307***	0.280***	0.193**
	0.092	0.095	0.087	0.060
	(5.34)	(5.30)	(4.83)	(2.07)
N. of Segments		-0.026***	-0.031***	-0.034***
		-0.042	-0.050	-0.054
		(-3.06)	(-3.45)	(-3.51)
Related Segments		0.016	0.014	-0.011
		0.016	0.014	-0.011
		(1.02)	(0.86)	(-0.60)
Vert. Relatedness		-0.000	-0.000	0.000
		-0.003	-0.007	0.004
		(-0.36)	(-0.72)	(0.11)
Excess Assets			0.012**	-0.016
			0.043	-0.060
			(2.18)	(-1.58)
Excess EBIT/Sales			-0.004***	-0.001***
			-0.084	-0.028
			(-8.03)	(-2.79)
Excess Capex/Sales			0.001***	0.003***
			0.013	0.030
			(2.61)	(8.53)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.023	0.024	0.033	0.027
N. of Observations	24,490	24,490	23,376	23,376

Table OA.11: Excess Value and Equally-Weighted Excess Centrality. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar equally-weighted portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Equally-Weighted Excess Centrality	0.438***	0.454***	0.430***	0.182
	0.080	0.083	0.079	0.033
	(5.39)	(5.15)	(4.88)	(1.59)
N. of Segments		-0.032***	-0.039***	-0.035***
		-0.047	-0.057	-0.052
		(-3.05)	(-3.52)	(-3.21)
Related Segments		0.034*	0.027	0.002
		0.034	0.027	0.002
		(1.84)	(1.50)	(0.08)
Vert. Relatedness		-0.000	-0.000	0.000
		-0.010	-0.013	0.002
		(-0.91)	(-1.18)	(0.05)
Excess Assets			0.016***	-0.014
			0.055	-0.048
			(2.74)	(-1.23)
Excess EBIT/Sales			-0.005***	-0.001***
			-0.090	-0.027
			(-9.16)	(-2.78)
Excess Capex/Sales			0.001***	0.003***
			0.013	0.029
			(2.68)	(8.75)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.020	0.022	0.033	0.024
N. of Observations	22,425	22,425	21,516	21,516

Table OA.12: Excess Value and Excess Centrality using Sales Weights. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the closeness centrality of a similar portfolio of specialized firms using as weights segment sales. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included in each specification but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality (Sales)	0.351***	0.358***	0.340***	0.109
	0.095	0.097	0.092	0.029
	(5.69)	(5.57)	(5.30)	(1.16)
N. of Segments		-0.031***	-0.038***	-0.033***
		-0.045	-0.056	-0.049
		(-2.97)	(-3.45)	(-3.05)
Related Segments		0.040**	0.033*	0.003
		0.040	0.033	0.003
		(2.17)	(1.81)	(0.17)
Vert. Relatedness		-0.000	-0.000	-0.000
		-0.009	-0.013	-0.007
		(-0.87)	(-1.21)	(-0.23)
Excess Assets			0.016***	-0.014
			0.055	-0.047
			(2.79)	(-1.20)
Excess EBIT/Sales			-0.005***	-0.002***
			-0.089	-0.027
			(-9.05)	(-2.81)
Excess Capex/Sales			0.001***	0.003***
			0.013	0.029
			(2.65)	(8.75)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.023	0.025	0.036	0.024
N. of Observations	22,272	22,272	21,367	21,367

Table OA.13: Excess Value and Excess Centrality using Capex Weights. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the closeness centrality of a similar portfolio of specialized firms using as weights segment capital expenditures. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included in each specification but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality (Capex)	0.292***	0.293***	0.269***	0.089
	0.089	0.089	0.082	0.027
	(4.81)	(4.68)	(4.39)	(1.45)
N. of Segments		-0.031***	-0.039***	-0.026**
		-0.047	-0.061	-0.040
		(-2.81)	(-3.42)	(-2.36)
Related Segments		0.045**	0.032*	0.016
		0.047	0.034	0.017
		(2.33)	(1.71)	(0.82)
Vert. Relatedness		-0.000	-0.000*	0.000
		-0.015	-0.020	0.020
		(-1.40)	(-1.84)	(0.83)
Excess Assets			0.026***	-0.008
			0.087	-0.028
			(4.14)	(-0.72)
Excess EBIT/Sales			-0.006***	-0.002***
			-0.100	-0.033
			(-8.57)	(-3.02)
Excess Capex/Sales			0.001	0.003***
			0.009	0.025
			(1.39)	(5.12)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.023	0.026	0.044	0.025
N. of Observations	18,479	18,479	17,879	17,879

Table OA.14: Excess Value and Excess Centrality: Goodwill Adjustment. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. Tobin's Q is adjusted for differences in goodwill, as proposed in Custódio (2013). The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality	0.476***	0.456***	0.423***	0.265**
	0.120	0.115	0.107	0.067
	(6.83)	(6.29)	(5.93)	(2.55)
N. of Segments		-0.032***	-0.043***	-0.035***
		-0.046	-0.063	-0.051
		(-3.06)	(-4.01)	(-3.13)
Related Segments		0.046**	0.033*	0.006
		0.045	0.033	0.006
		(2.51)	(1.86)	(0.33)
Vert. Relatedness		-0.000***	-0.000***	0.000
		-0.039	-0.047	0.022
		(-3.14)	(-3.59)	(0.48)
Excess Assets			0.026***	-0.005
			0.090	-0.016
			(4.60)	(-0.41)
Excess EBIT/Sales			-0.005***	-0.001**
			-0.080	-0.020
			(-8.22)	(-2.46)
Excess Capex/Sales			0.002***	0.003***
			0.017	0.030
			(3.45)	(10.12)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.024	0.028	0.043	0.020
N. of Observations	22,415	22,415	21,507	21,507

Table OA.15: Excess Value and Excess Centrality: Assets Match. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The data includes only conglomerates whose total assets stated in Compustat Segments differ at most by 5% from the total assets stated in Compustat Fundamentals. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality	0.387***	0.376***	0.352***	0.311**
	0.097	0.094	0.088	0.078
	(4.99)	(4.66)	(4.29)	(2.58)
N. of Segments		-0.017	-0.021	-0.036**
		-0.023	-0.030	-0.050
		(-1.34)	(-1.60)	(-2.50)
Related Segments		0.027	0.024	0.001
		0.025	0.022	0.001
		(1.19)	(1.07)	(0.05)
Vert. Relatedness		-0.000*	-0.000*	0.000
		-0.019	-0.020	0.003
		(-1.72)	(-1.80)	(0.13)
Excess Assets			0.010	-0.016
			0.033	-0.055
			(1.54)	(-1.17)
Excess EBIT/Sales			-0.005***	-0.001*
			-0.088	-0.023
			(-7.98)	(-1.75)
Excess Capex/Sales			0.002***	0.003***
			0.019	0.034
			(4.07)	(6.05)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.021	0.022	0.031	0.026
N. of Observations	15,494	15,494	14,819	14,819

Table OA.16: Excess Value and Excess Centrality: Min. 5 Specialized Firms per Industry. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. We only include industries with at least 5 specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality	0.379***	0.392***	0.370***	0.272***
	0.102	0.106	0.100	0.074
	(5.99)	(5.93)	(5.56)	(2.91)
N. of Segments		-0.025**	-0.030***	-0.037***
		-0.039	-0.046	-0.057
		(-2.57)	(-2.93)	(-3.37)
Related Segments		0.016	0.010	0.002
		0.017	0.010	0.002
		(0.97)	(0.59)	(0.11)
Vert. Relatedness		-0.000	-0.000	-0.000
		-0.005	-0.009	-0.001
		(-0.49)	(-0.78)	(-0.02)
Excess Assets			0.013**	-0.007
			0.048	-0.027
			(2.37)	(-0.65)
Excess EBIT/Sales			-0.004***	-0.001***
			-0.081	-0.025
			(-8.29)	(-3.10)
Excess Capex/Sales			0.001*	0.003***
			0.010	0.029
			(1.81)	(10.15)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.029	0.030	0.039	0.035
N. of Observations	22,425	22,425	21,516	21,516

Table OA.17: Excess Value and Excess Centrality: Unadjusted Control Variables. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. The first 2 columns use the 1997 BEA Input-Output network, and the last 3 columns use the annual 1998-2011 BEA Input-Output networks. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	1997 Network		Time-Varying Network		
	(1)	(2)	(3)	(4)	(5)
Excess Centrality	0.397***	0.271***			
	0.102	0.070			
	(5.60)	(2.63)			
Equally-Weighted Exc. Centrality			0.512***	0.385***	0.468**
			0.113	0.085	0.103
			(4.73)	(3.13)	(2.38)
N. of Segments	-0.025**	-0.037***	-0.033**	-0.031*	
	-0.036	-0.054	-0.049	-0.045	
	(-2.30)	(-3.32)	(-2.18)	(-1.94)	
Related Segments	0.042**	0.002	-0.042***	-0.017	
	0.042	0.002	-0.058	-0.024	
	(2.28)	(0.11)	(-2.63)	(-0.83)	
Vert. Relatedness	-0.000	0.000	-0.001	0.001	0.001
	-0.003	0.007	-0.015	0.008	0.010
	(-0.31)	(0.17)	(-0.91)	(0.43)	(0.38)
Assets	-0.000***	-0.000***	-0.000**	-0.000***	-0.000***
	-0.041	-0.097	-0.034	-0.127	-0.130
	(-3.78)	(-4.96)	(-2.42)	(-4.75)	(-2.67)
EBIT/Sales	-0.004*	-0.002	-0.008	-0.001	0.000
	-0.024	-0.014	-0.050	-0.006	0.001
	(-1.90)	(-1.39)	(-1.63)	(-0.50)	(0.14)
Capex/Sales	0.001	-0.003	-0.001	-0.002	-0.006
	0.001	-0.003	-0.001	-0.004	-0.005
	(0.16)	(-0.30)	(-0.13)	(-0.88)	(-0.22)
Year FE	Yes	Yes	Yes	Yes	Yes
Firm FE	No	Yes	No	Yes	No
Firm-Cohort FE	No	No	No	No	Yes
R^2	0.028	0.025	0.025	0.024	0.025
N. of Observations	21,553	21,553	11,375	11,375	9,907

Table OA.18: Excess Value and Excess Centrality: Excluding Retail and Wholesale Industries. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The network does not include the retail and wholesale industries. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Ex. Centrality (Excl. Retail-Wholesale)	0.335***	0.344***	0.315***	0.236**
	0.086	0.088	0.081	0.061
	(4.86)	(4.84)	(4.47)	(2.19)
N. of Segments		-0.030***	-0.037***	-0.033***
		-0.044	-0.056	-0.050
		(-2.84)	(-3.39)	(-2.99)
Related Segments		0.036*	0.028	-0.006
		0.037	0.029	-0.006
		(1.95)	(1.54)	(-0.27)
Vert. Relatedness (Excl. Retail-Wholesale)		-0.000	-0.000	0.000*
		-0.001	-0.006	0.040
		(-0.10)	(-0.44)	(1.79)
Excess Assets			0.018***	-0.006
			0.060	-0.021
			(2.90)	(-0.53)
Excess EBIT/Sales			-0.005***	-0.001***
			-0.092	-0.027
			(-8.85)	(-2.62)
Excess Capex/Sales			0.002***	0.003***
			0.015	0.031
			(2.92)	(8.91)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.021	0.023	0.035	0.024
N. of Observations	20,212	20,212	19,356	19,356

Table OA.19: Excess Value and Excess Centrality: Excluding Conglomerates in Professional, Scientific, and Technical Services. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The sample does not include conglomerates where at least one segment is present in professional, scientific, and technical services industries. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Ex. Centrality	0.415***	0.416***	0.388***	0.305***
	0.108	0.108	0.101	0.079
	(6.14)	(5.88)	(5.45)	(2.82)
N. of Segments		-0.028***	-0.036***	-0.046***
		-0.042	-0.054	-0.069
		(-2.62)	(-3.19)	(-4.00)
Related Segments		0.036*	0.030	0.016
		0.037	0.030	0.016
		(1.93)	(1.60)	(0.77)
Vert. Relatedness		-0.000	-0.000	0.000
		-0.012	-0.016	0.005
		(-1.09)	(-1.39)	(0.13)
Excess Assets			0.017***	-0.008
			0.060	-0.027
			(2.85)	(-0.66)
Excess EBIT/Sales			-0.005***	-0.002***
			-0.083	-0.027
			(-7.96)	(-2.61)
Excess Capex/Sales			0.001**	0.003***
			0.014	0.029
			(2.50)	(7.98)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.025	0.027	0.038	0.027
N. of Observations	20,613	20,613	19,772	19,772

Table OA.20: Excess Value and Excess Centrality: Excluding the Professional, Scientific, and Technical Services Industry. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The network does not include the professional, scientific, and technical services industry. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Ex. Centrality (Excl. Prof Services)	0.416***	0.417***	0.389***	0.318***
	0.107	0.107	0.100	0.082
	(6.11)	(5.86)	(5.41)	(2.94)
N. of Segments		-0.028***	-0.036***	-0.046***
		-0.042	-0.054	-0.069
		(-2.64)	(-3.21)	(-4.04)
Related Segments		0.037*	0.030	0.016
		0.037	0.031	0.016
		(1.94)	(1.61)	(0.78)
Vert. Relatedness (Excl. Prof Services)		-0.000	-0.000	0.000
		-0.012	-0.016	0.005
		(-1.09)	(-1.40)	(0.12)
Excess Assets			0.017***	-0.008
			0.060	-0.027
			(2.86)	(-0.66)
Excess EBIT/Sales			-0.005***	-0.002***
			-0.083	-0.027
			(-7.96)	(-2.59)
Excess Capex/Sales			0.001**	0.003***
			0.014	0.029
			(2.53)	(7.99)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.025	0.027	0.038	0.027
N. of Observations	20,595	20,595	19,756	19,756

Table OA.21: Excess Value and Excess Centrality: Excluding Conglomerates in Highly Concentrated Industries (top decile). The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. The sample excludes conglomerates that have at least one segment in an industry in the top decile of industry concentration, measured by the sales-based Herfindal Index. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the closeness centrality of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included in each specification but not reported in the table.Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality	0.373***	0.379***	0.355***	0.236**
	0.096	0.098	0.092	0.061
	(5.74)	(5.58)	(5.22)	(2.22)
N. of Segments		-0.030***	-0.036***	-0.037***
		-0.045	-0.053	-0.055
		(-3.00)	(-3.38)	(-3.36)
Related Segments		0.036**	0.031*	0.007
		0.036	0.031	0.007
		(1.96)	(1.73)	(0.34)
Vert. Relatedness		-0.000	-0.000	0.000
		-0.009	-0.012	0.005
		(-0.82)	(-1.04)	(0.12)
Excess Assets			0.013**	-0.015
			0.045	-0.051
			(2.34)	(-1.28)
Excess EBIT/Sales			-0.005***	-0.001***
			-0.089	-0.026
			(-8.89)	(-2.65)
Excess Capex/Sales			0.001**	0.003***
			0.013	0.030
			(2.43)	(8.72)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.023	0.025	0.035	0.025
N. of Observations	22,130	22,130	21,230	21,230

Table OA.22: Excess Value and Excess Centrality: Excluding Conglomerates in Highly Concentrated Industries (top 2 deciles). The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. The sample excludes conglomerates that have at least one segment in an industry in the top two deciles of industry concentration, measured by the sales-based Herfindal Index. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the closeness centrality of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included in each specification but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality	0.279***	0.288***	0.267***	0.184*
	0.072	0.075	0.069	0.048
	(4.59)	(4.54)	(4.16)	(1.88)
N. of Segments		-0.031***	-0.035***	-0.034***
		-0.046	-0.052	-0.050
		(-3.17)	(-3.40)	(-3.08)
Related Segments		0.035*	0.032*	0.007
		0.035	0.033	0.007
		(1.91)	(1.80)	(0.33)
Vert. Relatedness		-0.000	-0.000	-0.000
		-0.006	-0.008	-0.005
		(-0.56)	(-0.72)	(-0.12)
Excess Assets			0.010*	-0.027**
			0.034	-0.094
			(1.75)	(-2.30)
Excess EBIT/Sales			-0.004***	-0.001**
			-0.086	-0.026
			(-8.53)	(-2.39)
Excess Capex/Sales			0.001**	0.003***
			0.013	0.032
			(2.41)	(9.00)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.022	0.024	0.033	0.028
N. of Observations	20,900	20,900	20,043	20,043

Table OA.23: Excess Value and Excess Centrality: Excluding Conglomerates with Significant Merger Activity. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The sample does not include conglomerates in years in which the acquisition activity exceeds 5% of their assets. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the closeness centrality of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included in each specification but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality	0.360***	0.363***	0.342***	0.273**
	0.092	0.093	0.088	0.070
	(5.35)	(5.16)	(4.83)	(2.28)
N. of Segments		-0.031***	-0.036***	-0.038***
		-0.045	-0.053	-0.055
		(-2.87)	(-3.21)	(-3.21)
Related Segments		0.041**	0.035*	0.008
		0.040	0.035	0.008
		(2.16)	(1.89)	(0.39)
Vert. Relatedness		-0.000	-0.000	-0.000
		-0.009	-0.013	-0.001
		(-0.85)	(-1.09)	(-0.02)
Excess Assets			0.013**	-0.018
			0.047	-0.061
			(2.22)	(-1.43)
Excess EBIT/Sales			-0.005***	-0.001**
			-0.088	-0.027
			(-8.69)	(-2.55)
Excess Capex/Sales			0.001**	0.003***
			0.012	0.030
			(2.25)	(8.23)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.022	0.024	0.034	0.025
N. of Observations	19,503	19,503	18,725	18,725

Table OA.24: Excess Value, Excess Centrality, and Systematic Risk. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the closeness centrality of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included in each specification but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality	0.406***	0.413***	0.373***	0.252**
	0.108	0.110	0.100	0.068
	(5.87)	(5.70)	(5.23)	(2.24)
Equity Beta	0.064***	0.064***	0.037***	0.034***
	0.063	0.063	0.036	0.034
	(5.09)	(5.12)	(2.81)	(3.56)
N. of Segments		-0.029***	-0.040***	-0.036***
		-0.043	-0.061	-0.054
		(-2.64)	(-3.49)	(-3.04)
Related Segments		0.046**	0.033*	-0.001
		0.047	0.034	-0.001
		(2.41)	(1.77)	(-0.06)
Vert. Relatedness		0.000	-0.000	0.000
		0.000	-0.006	0.032
		(0.04)	(-0.58)	(1.38)
Excess Assets			0.031***	-0.008
			0.103	-0.028
			(5.04)	(-0.70)
Excess EBIT/Sales			-0.005***	-0.002**
			-0.098	-0.028
			(-9.21)	(-2.57)
Excess Capex/Sales			0.002***	0.003***
			0.015	0.031
			(3.43)	(9.30)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.032	0.034	0.053	0.030
N. of Observations	20,026	20,026	19,185	19,185

Table OA.25: Excess Value, Excess Centrality, and Excess Systematic Risk. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The table presents OLS regression coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the closeness centrality of a similar portfolio of specialized firms. Excess Beta is the difference between the equity beta of the conglomerate and the equity beta of a similar portfolio of specialized firms. All network variables use the 1997 BEA Input-Output network. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included in each specification but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	(1)	(2)	(3)	(4)
Excess Centrality	0.358***	0.370***	0.346***	0.250**
	0.096	0.099	0.093	0.067
	(5.41)	(5.34)	(4.97)	(2.22)
Excess Equity Beta	0.169***	0.169***	0.150***	0.064***
	0.161	0.161	0.142	0.061
	(12.02)	(12.18)	(10.95)	(5.97)
N. of Segments		-0.031***	-0.037***	-0.036***
		-0.046	-0.056	-0.054
		(-2.87)	(-3.27)	(-3.08)
Related Segments		0.041**	0.035*	-0.002
		0.041	0.036	-0.002
		(2.19)	(1.90)	(-0.09)
Vert. Relatedness		0.000	-0.000	0.000
		0.002	-0.001	0.033
		(0.21)	(-0.10)	(1.43)
Excess Assets			0.018***	-0.017
			0.059	-0.058
			(2.99)	(-1.44)
Excess EBIT/Sales			-0.005***	-0.002**
			-0.094	-0.027
			(-9.04)	(-2.53)
Excess Capex/Sales			0.002***	0.003***
			0.017	0.031
			(3.86)	(9.42)
Year FE	Yes	Yes	Yes	Yes
Firm FE	No	No	No	Yes
R^2	0.054	0.057	0.070	0.035
N. of Observations	19,948	19,948	19,137	19,137

OA.6 Additional tables

Table OA.26: Excess Centrality and Excess Value – Time-Varying Network. Excluding Conglomerates in Highly Concentrated Industries. The dependent variable is Excess Value, defined as the log-difference between the Tobin's Q of a conglomerate and the Tobin's Q of a similar portfolio of specialized firms. The sample excludes conglomerates that have at least one segment in an industry in the top decile (columns 1 to 4) or in the top two deciles (columns 5 to 8) of industry concentration, measured by the sales-based Herfindal Index. The table presents OLS coefficients, beta coefficients and robust t-statistics clustered at the conglomerate level. Equally-Weighted Excess Centrality is defined as the log-difference between the closeness centrality of a conglomerate and the one of a similar equally-weighted portfolio of specialized firms using the annual 1998-2011 BEA Input-Output networks. A firm-cohort is defined as a sequence of adjacent years during which the firm did not change its industry portfolio. Inclusion of fixed effects is indicated at the end. The independent variables are lagged one year. All variables are defined in detail in the appendix of the main text. A constant is included in each specification but not reported in the table. Significance at 10%, 5%, and 1%, is indicated by *, **, and ***.

	Excl. Top Decile of Ind. Concentration				Excl. Top 2 Deciles of Ind. Concentration			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Eq.-Weighted Ex. Centrality	0.444***	0.386***	0.457**	0.466*	0.414***	0.357***	0.438**	0.388
	0.097	0.084	0.100	0.092	0.087	0.075	0.092	0.073
	(4.38)	(3.31)	(2.28)	(1.89)	(3.67)	(2.78)	(2.05)	(1.50)
N. Segments	-0.028*	-0.032**			-0.024	-0.037**		
	-0.040	-0.047			-0.034	-0.053		
	(-1.89)	(-2.05)			(-1.51)	(-2.16)		
Related Segments	-0.022	-0.006		-0.004	-0.020	0.004		-0.003
	-0.031	-0.008		-0.004	-0.029	0.006		-0.003
	(-1.39)	(-0.27)		(-0.05)	(-1.23)	(0.19)		(-0.03)
Vert. Relatedness	0.001	0.001	0.000	-0.004*	0.001	0.001	0.000	-0.004*
	0.006	0.006	0.000	-0.040	0.012	0.006	0.001	-0.035
	(0.36)	(0.29)	(0.00)	(-1.76)	(0.69)	(0.32)	(0.04)	(-1.79)
Excess Assets	-0.026***	-0.118***	-0.132***	-0.138***	-0.023***	-0.115***	-0.135***	-0.138***
	-0.114	-0.524	-0.584	-0.579	-0.105	-0.516	-0.603	-0.578
	(-4.34)	(-10.85)	(-9.94)	(-8.55)	(-4.06)	(-9.99)	(-10.04)	(-7.85)
Excess EBIT/Sales	-0.005***	-0.001**	-0.000	0.000	-0.005***	-0.001**	-0.000	0.000
	-0.118	-0.019	-0.011	0.005	-0.119	-0.024	-0.010	0.006
	(-7.34)	(-2.07)	(-1.16)	(0.36)	(-6.78)	(-2.45)	(-1.01)	(0.37)
Excess Capex/Sales	0.000	0.003***	0.003***	0.003***	0.000	0.003***	0.003***	0.003***
	0.000	0.050	0.053	0.053	0.004	0.046	0.047	0.043
	(0.04)	(14.63)	(14.57)	(8.94)	(0.49)	(9.08)	(8.42)	(4.21)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	No	Yes	No	Yes	No	Yes	No	Yes
Firm-Cohort FE	No	No	Yes	No	No	No	Yes	No
R^2	0.044	0.060	0.062	0.060	0.041	0.057	0.061	0.058
N. of Observations	11,011	11,011	9,584	5,156	9,886	9,886	8,611	4,700

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