Valuations in Corporate Takeovers and

Financial Constraints on Private Targets

Internet Appendix

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TABLE A1
Private Target Use of Debt Financing, Industry-Year Announced Matched Sample

Panel A shows the average annual change in balance sheet measures for private targets in states that deregulate interstate bank branching. For each variable, the first row shows the average annual change, the second row shows the *t*-statistic, and the third row shows the number of observations. The balance sheet must be dated at least six months before or after the date of deregulation. The pre-deregulation (post-deregulation) period includes annual changes to balance sheet measures for balance sheets dated before (after) the date of deregulation. To calculate industry matched pre-deregulation data, each post-deregulation observation is matched to all pre-deregulation observations in the same two-digit SIC code industry where the year that the deal was announced is within one year. For each post-deregulation observation, the average value of all the matched observations is then calculated. Δln(LIABILITIES) (Δln(ASSETS), Δln(OUTSIDE_DEBT)) is the annual change in the natural logarithm of inflation adjusted total liabilities (total assets, outside debt). ΔLIABILITIES/ASSETS (ΔOUTSIDE_DEBT/ASSETS) is the annual change to total liabilities (outside debt) divided by total assets. Outside debt is the sum of lines of credit, notes payable, mortgages payable, capitalized lease obligations, and other debt held by those outside the firm such as banks and financial institutions (Zarutskie, 2006). Information contained in the notes to financial statements is used to classify a liability as outside debt. When this information is missing, outside debt measures are set to missing. Variables are winsorized at the 10th and 90th percentiles separately for pre-deregulation and post-deregulation observations. In the third column, *t*-tests do not assume that pre-deregulation and post-deregulation data have equal variances. Panel B shows regression results where POST_DEREGULATION_DUMMY is set to one for the 34 post-deregulation observations. *t*-statistics, clustered by private target and robust to heteroskedasticity, are in parentheses. *** and ** indicate statistical significance at the 1% and 5% levels, respectively.

Panel A. Univariate Analysis

	Matched Pre-Deregulation	Post-Deregulation	Difference
	(1)	(2)	(2)-(1)
Δln(LIABILITIES)	0.350***	0.555***	0.205**
	(14.911)	(6.440)	(2.291)
	34	34	
Δln(ASSETS)	0.437***	0.414***	−0.023
	(17.996)	(5.797)	(−0.302)
	34	34	
ΔLIABILITIES/ASSETS	−0.085***	0.009	0.094**
	(−12.261)	(0.229)	(2.271)
	34	34	
Δln(OUTSIDE_DEBT)	−0.151	0.625	0.776
	(.)	(.)	(.)
	3	3	
ΔOUTSIDE_DEBT/ASSETS	−0.030	0.025	0.055
	(.)	(.)	(.)
	3	3	

Panel B. Multivariate Analysis

	Δln(LIABILITIES)
POST_DEREGULATION_DUMMY	0.219***
	(2.933)
Δln(ASSETS)	0.642***
	(3.680)
Constant	0.070
	(0.900)
No. of obs.	68
R^2	0.35

TABLE A2
Operating Performance Around Deal Announcement, Large Private Targets

Mean and median changes in operating performance around deal announcements. Big targets are those where deal value-to-acquirer market value is above the sample median of 0.18. The acquirer's operating performance is shown prior to the acquisition and the combined firm's operating performance is shown following the acquisition. In Panel A, operating income margin is operating income divided by sales (OIBDP/SALE). In Panel B, cash flow margin is net cash flow from operating activities divided by sales (OANCF/SALE). Both measures are industry adjusted by subtracting the median value of all Compustat firms in the same two-digit SIC code industry in the same fiscal year. For median changes, *t*-statistics (in parentheses) are from a Wilcoxon test where the null is that the distributions of the two sub-samples are the same. For mean changes, *t*-statistics are from a *t*-test for a difference in the mean between the two sub-samples. * indicates statistical significance at the 10% level.

	Median Changes for Big Targets			Mean Changes for All Targets			Mean Changes for Big Targets		
	-1 to +1	-1 to +2	-1 to +3	-1 to +1	-1 to +2	-1 to +3	-1 to +1	-1 to +2	-1 to +3
Panel A. Operating Income Margin									
DEREG_STATE×AFTER=0	0.007	0.011	0.012	0.013	0.000	0.000	0.021	0.006	0.010
DEREG_STATE×AFTER=1	0.013	0.006	0.006	0.035	0.022	0.004	0.039	0.020	−0.004
Difference-in-differences	0.006	−0.005	−0.006	0.022	0.023*	0.003	0.017	0.014	−0.014
t for diff in distribution	(0.447)	(−0.991)	(−0.396)	(1.578)	(1.730)	(0.236)	(0.961)	(−0.773)	(−0.703)
Panel B. Cash Flow Margin									
DEREG_STATE×AFTER=0	0.002	0.010	−0.005	0.005	0.000	0.000	0.015	0.009	−0.003
DEREG_STATE×AFTER=1	0.000	0.000	0.000	0.008	−0.004	−0.018	0.012	−0.001	−0.023
Difference-in-differences	−0.002	−0.009	0.005	0.003	−0.005	−0.018	−0.003	−0.010	−0.020
t for diff in distribution	(−0.384)	(−0.361)	(0.843)	(0.263)	(−0.455)	(−1.319)	(−0.199)	(−0.772)	(−1.033)

TABLE A3
Operating Performance Around Deal Announcement, Return on Assets

Panel A shows return on assets (ROA) around deal announcements. The first five columns are the median value for a given fiscal year relative to the fiscal year during which the deal was announced. The last three columns are median changes over various horizons. The acquirer's operating performance is shown prior to the acquisition and the combined firm's operating performance is shown following the acquisition. The number of observations is 494 when measuring the change from -1 to +1, 447 when measuring the change from -1 to +2, and 412 when measuring the change from -1 to +3. For the DEREG_STATE×AFTER = 0 subsample, the number of observations is 225, 206, and 191 when measuring the change from -1 to +1, -1 to +2, and -1 to +3, respectively. For the DEREG_STATE×AFTER = 1 subsample, the corresponding number of observations is 269, 241, and 221. ROA is income before extraordinary items divided by total assets (IB/AT). ROA is industry adjusted by subtracting the median value of all Compustat firms in the same two-digit SIC code industry in the same fiscal year. *t*-statistics (in parentheses) are from a Wilcoxon test where the null is that the distributions of the two sub-samples are the same. Panel B shows mean and median changes in acquirer ROA around deal announcements. Big targets are those where deal value-to-acquirer market value is above the sample median of 0.18. For median changes, *t*-statistics (in parentheses) are from a Wilcoxon test where the null is that the distributions of the two sub-samples are the same. For mean changes, *t*-statistics are from a *t*-test for a difference in the mean between the two sub-samples. * indicates statistical significance at the 10% level.

Panel A. Acquirer ROA Around the Deal Announcement

	Fiscal Year Relative to Announcement					Median Changes		
	−1	0	+1	+2	+3	−1 to +1	−1 to +2	−1 to +3
Full Sample	0.022	0.021	0.022	0.022	0.024	−0.003	0.001	0.000
DEREG_STATE×AFTER=0	0.017	0.021	0.021	0.024	0.023	−0.002	0.001	0.001
DEREG_STATE×AFTER=1	0.027	0.021	0.022	0.021	0.025	−0.003	−0.002	−0.002
Difference-in-differences						−0.001	−0.003	−0.003
t for diff in distribution						(−0.994)	(−0.993)	(−0.876)

Panel B. Acquirer ROA, Split by Relative Size

	Median Changes for Big Targets			Mean Changes for All Targets			Mean Changes for Big Targets		
	−1 to +1	−1 to +2	−1 to +3	−1 to +1	−1 to +2	−1 to +3	−1 to +1	−1 to +2	−1 to +3
DEREG_STATE×AFTER=0	−0.001	−0.002	−0.005	−0.001	−0.020	−0.032	−0.002	−0.015	−0.035
DEREG_STATE×AFTER=1	−0.007	−0.006	−0.006	−0.001	−0.064	−0.040	−0.006	−0.051	−0.028
Difference-in-differences	−0.006	−0.004	−0.001	0.000	−0.044*	−0.008	−0.004	−0.036	0.006
t for diff in distribution	(−0.578)	(−0.866)	(−0.640)	(0.018)	(−1.710)	(−0.298)	(−0.275)	(−1.314)	(0.188)

TABLE A4
Predict Deregulation at the State Level

Coefficients from probit regressions where the sample is 50 U.S. states. The dependent variable is 1 for states that deregulate interstate bank branching (DEREG_STATE = 1). The District of Columbia is excluded because data are missing for several variables. Independent variables are created following the methodologies in Kroszner and Strahan (1999). I thank Phil Strahan for providing data. *t*-statistics (in parentheses) are based on heteroskedasticity-robust standard errors. *** indicates statistical significance at the 1% level.

	Predict: DEREG_STATE = 1
Small Bank Share of Deposits in State	−24.225***
	(−3.258)
Governor is Democrat (Dummy)	−0.726
	(−1.348)
State Income Growth	−17.818
	(−1.516)
Small Firm Share of All Firms in State	0.150
	(0.010)
Banks Can Sell Insurance (Dummy)	0.956
	(0.635)
Relative Size of Insurance, if Banks Can Sell Insurance=0	−0.716
	(−0.423)
Relative Size of Insurance, if Banks Can Sell Insurance=1	−2.156
	(−0.885)
Constant	2.736
	(0.210)
No. of obs.	50
Pseudo R^2	0.16

TABLE A5
Exclude Private Targets Located in States Most Likely to Deregulate or Not

Replications of Tables 4, 5, and 6 in Panels A, B, and C, respectively, where 112 deals in states that were most likely to deregulate or not (AR, AZ, CA, IA) are excluded from the sample. Only the coefficient on the variable of interest in each regression is reported. DEREG_STATE×AFTER is a dummy variable that equals 1 if the target's state has deregulated interstate bank branching laws at the time of the sellout. ln(DEAL_VALUE_TO_SALES) is the natural logarithm of SDC deal value divided by the target's annual sales. ln(PRIVATE_TO_PUBLIC_VALUE) is the natural logarithm of the deal value-to-sales ratio of the private target divided by the average deal value-to-sales ratio of matched public targets. ACQUIRER_CAR is the cumulative abnormal return of the acquirer over the (-5, +5) day window around the deal announcement. *t*-statistics (in parentheses) are based on robust standard errors clustered by state. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Replicate Table 4, Dependent Variable is ln(DEAL_VALUE_TO_SALES)

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	0.561***	0.496**	0.738**	0.622**
	(2.975)	(2.521)	(2.527)	(2.301)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	445	445	311	311

Panel B. Replicate Table 5, Dependent Variable is ln(PRIVATE_TO_PUBLIC_VALUE)

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	0.554**	0.649**	0.504*	0.727*
	(2.095)	(2.136)	(1.734)	(2.007)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	334	334	232	232

Panel C. Replicate Table 6, Dependent Variable is ACQUIRER_CAR

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	−4.125**	−4.555**	−6.786***	−7.618***
	(−2.085)	(−2.516)	(−2.995)	(−3.755)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	445	445	311	311

TABLE A6
Control for the Effect of Deregulation on Entrepreneurship

Regression results where additional variables are added to the specifications in Tables 4, 5, and 6. The sample is 557 acquisitions of private targets by public acquirers. Each regression includes the independent variables in Tables 4, 5, and 6, as well as state, year, and industry fixed effects. PRIVATE_FIRMS is the number of private firms in each state and is calculated by subtracting the number of public firms in Compustat from the number of firms with at least one employee reported by the Census. GROWTH_IN_PRIVATE_FIRMS is the annual percentage change in PRIVATE_FIRMS. DEREG_STATE×AFTER is a dummy variable that equals 1 if the target's state has deregulated interstate bank branching laws at the time of the sellout. ln(DEAL_VALUE_TO_SALES) is the natural logarithm of SDC deal value divided by the target's annual sales. ln(PRIVATE_TO_PUBLIC_VALUE) is the natural logarithm of the deal value-to-sales ratio of the private target divided by the average deal value-to-sales ratio of matched public targets. ACQUIRER_CAR is the cumulative abnormal return of the acquirer over the (-5, +5) day window around the deal announcement. In the odd (even) numbered columns sellouts are announced three (two) years before to three (two) years after the state's response to IBBEA. *t*-statistics (in parentheses) are based on robust standard errors clustered by state. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A.

	ln(DEAL_VALUE_TO_SALES)		ln(PRIVATE_TO_PUBLIC_VALUE)		ACQUIRER_CAR	
	(1)	(2)	(3)	(4)	(5)	(6)
DEREG_STATE×AFTER	0.446**	0.617**	0.650**	0.975***	−3.243*	−7.736***
	(2.681)	(2.475)	(2.055)	(3.201)	(−1.715)	(−4.678)
ln(PRIVATE_FIRMS)	7.983*	2.983	6.667	6.320	−1.495	−5.975
	(1.859)	(0.405)	(1.242)	(0.617)	(−0.029)	(−0.077)
Control Variables & F.E.	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	557	383	431	295	557	383

Panel B.

	ln(DEAL_VALUE_TO_SALES)		ln(PRIVATE_TO_PUBLIC_VALUE)		ACQUIRER_CAR	
	(1)	(2)	(3)	(4)	(5)	(6)
DEREG_STATE×AFTER	0.358**	0.556**	0.642**	0.857**	−3.341	−8.211***
	(2.043)	(2.065)	(2.100)	(2.495)	(−1.640)	(−4.843)
GROWTH_IN_PRIVATE_FIRMS	12.493	8.485	−1.882	14.916	21.783	101.925
	(1.536)	(0.576)	(−0.146)	(0.912)	(0.212)	(0.802)
Control Variables & F.E.	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	557	383	431	295	557	383

TABLE A7
Control for Alternative Motivations for Mergers

Regression results where additional variables are added to the specifications in Tables 4, 5, and 6. The sample is 557 acquisitions of private targets by public acquirers. Each regression includes the independent variables in Tables 4, 5, and 6, as well as state, year, and industry fixed effects. COMMON_KNOWLEDGE_BASE is a dummy set to one if there is any overlap in the patents cited by the acquirer's patents and the patents cited by the target's patents. CROSS_CITATION is a dummy set to 1 if any of the acquirer's patents cite a patent of the target or if any of the target's patents cite a patent of the acquirer. These variables are calculated using patent data from the NBER patent database and the methodology follows that in Bena and Li (2014). VERTICAL_MERGER is a dummy that is set to 1 if the acquirer and target have a vertical relationship based on industry level benchmark Input-Output data from the Bureau of Economic Analysis. ACQ_LOW_Q is a dummy set to 1 if the acquirer's Tobin's Q (measured before the announcement) is below 1. ACQ_FCF is the free cash flow of the acquirer prior to the announcement. IPO_FIRST_DAY_RETURN is the average first day percentage return of IPOs and IPO_VOLUME is the net IPO volume. Both variables are obtained from data on Jay Ritter's website and are measured before the announcement of the deal. DEREG_STATE×AFTER is a dummy variable that equals 1 if the target's state has deregulated interstate bank branching laws at the time of the sellout. ln(DEAL_VALUE_TO_SALES) is the natural logarithm of SDC deal value divided by the target's annual sales. ln(PRIVATE_TO_PUBLIC_VALUE) is the natural logarithm of the deal value-to-sales ratio of the private target divided by the average deal value-to-sales ratio of matched public targets. ACQUIRER_CAR is the cumulative abnormal return of the acquirer over the (-5, +5) day window around the deal announcement. In the odd (even) numbered columns sellouts are announced three (two) years before to three (two) years after the state's response to IBBEA. *t*-statistics (in parentheses) are based on robust standard errors clustered by state. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Proxy for Complementary Assets/Technological Overlap Between Merging Firms

	ln(DEAL_VALUE_TO_SALES)		ln(PRIVATE_TO_PUBLIC_VALUE)		ACQUIRER_CAR	
	(1)	(2)	(3)	(4)	(5)	(6)
DEREG_STATE×AFTER	0.405**	0.566**	0.624**	0.874***	−3.164*	−7.703***
	(2.559)	(2.553)	(2.266)	(2.929)	(−1.704)	(−5.089)
COMMON_KNOWLEDGE_BASE	0.161	0.389	0.057	0.312	−1.661	−1.669
	(0.853)	(1.383)	(0.186)	(0.762)	(−0.969)	(−0.709)
Control Variables & F.E.	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	557	383	431	295	557	383

Panel B. Proxy for Complementary Assets/Technological Overlap Between Merging Firms

	ln(DEAL_VALUE_TO_SALES)		ln(PRIVATE_TO_PUBLIC_VALUE)		ACQUIRER_CAR	
	(1)	(2)	(3)	(4)	(5)	(6)
DEREG_STATE×AFTER	0.420**	0.599**	0.632**	0.930***	−3.258*	−7.829***
	(2.620)	(2.483)	(2.172)	(3.078)	(−1.746)	(−5.200)
CROSS_CITATION	−0.031	0.131	0.072	0.008	−3.194	−3.282
	(−0.213)	(0.410)	(0.269)	(0.016)	(−1.322)	(−1.110)
Control Variables & F.E.	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	557	383	431	295	557	383

Panel C. Identify Mergers Along the Supply Chain

	ln(DEAL_VALUE_TO_SALES)		ln(PRIVATE_TO_PUBLIC_VALUE)		ACQUIRER_CAR	
	(1)	(2)	(3)	(4)	(5)	(6)
DEREG_STATE×AFTER	0.422**	0.583**	0.633**	0.916***	−3.210*	−7.751***
	(2.660)	(2.311)	(2.175)	(2.882)	(−1.757)	(−5.163)
VERTICAL_MERGER	0.023	−0.079	0.029	−0.183	0.336	−0.293
	(0.135)	(−0.556)	(0.152)	(−0.998)	(0.376)	(−0.259)
Control Variables & F.E.	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	557	383	431	295	557	383

continued...

TABLE A7, continued

Panel D. Proxy for Agency Problems: Acquirers with Poor Growth Prospects and Positive Free Cash Flow

	ln(DEAL_VALUE_TO_SALES)		ln(PRIVATE_TO_PUBLIC_VALUE)		ACQUIRER_CAR	
	(1)	(2)	(3)	(4)	(5)	(6)
DEREG_STATE×AFTER	0.409**	0.606**	0.629**	0.907***	−3.243*	−7.683***
	(2.588)	(2.405)	(2.083)	(3.003)	(−1.830)	(−5.209)
ACQ_LOW_Q	0.014	0.128	0.356	0.047	4.888*	4.536
	(0.072)	(0.568)	(1.015)	(0.109)	(1.705)	(1.204)
ACQ_FCF	−0.983	0.240	−0.801	0.345	−3.928	4.247
	(−1.479)	(0.260)	(−1.114)	(0.443)	(−0.893)	(0.639)
ACQ_LOW_Q*ACQ_FCF	0.648	−0.195	−0.532	−1.870	−7.917	−18.227
	(0.889)	(−0.218)	(−0.488)	(−1.204)	(−0.420)	(−0.636)
Control Variables & F.E.	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	557	383	431	295	557	383

Panel E. Proxy for Attractiveness of an IPO versus a Sellout

	ln(DEAL_VALUE_TO_SALES)		ln(PRIVATE_TO_PUBLIC_VALUE)		ACQUIRER_CAR	
	(1)	(2)	(3)	(4)	(5)	(6)
DEREG_STATE×AFTER	0.410**	0.601**	0.618**	0.931***	−3.496*	−7.736***
	(2.556)	(2.369)	(2.095)	(2.996)	(−1.987)	(−5.075)
IPO_FIRST_DAY_RETURN	0.005	0.005	0.003	0.008	0.062	0.059
	(1.192)	(1.110)	(0.536)	(0.973)	(1.018)	(0.856)
Control Variables & F.E.	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	557	383	431	295	557	383

Panel F. Proxy for Attractiveness of an IPO versus a Sellout

	ln(DEAL_VALUE_TO_SALES)		ln(PRIVATE_TO_PUBLIC_VALUE)		ACQUIRER_CAR	
	(1)	(2)	(3)	(4)	(5)	(6)
DEREG_STATE×AFTER	0.420**	0.594**	0.632**	0.928***	−3.178*	−7.647***
	(2.643)	(2.387)	(2.162)	(2.916)	(−1.738)	(−5.128)
IPO_VOLUME	0.000	−0.002	0.004	−0.001	−0.029	−0.029
	(0.046)	(−0.328)	(0.796)	(−0.067)	(−0.921)	(−0.744)
Control Variables & F.E.	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	557	383	431	295	557	383

TABLE A8
Univariate Test: Deregulated versus Non-Deregulated Banking Environment

Univariate tests for a sample of 557 acquisitions of private targets by public acquirers. The sample is divided based on whether the sellout occurred in a deregulated or non-deregulated banking environment. Differences in means are tested with a *t*-test and p-values are presented. When DEREG_STATE×AFTER equals zero (one), the number of observations is 180 (251) for ln(PRIVATE_TO_PUBLIC_VALUE) and 246 (311) for all other variables. *** indicates statistical significance at the 1% level.

	DEREG_STATE×AFTER=0 N=246	DEREG_STATE×AFTER=1 N=311		
Variable	Mean	Mean	Difference	p-value
ln(DEAL_VALUE_TO_SALES)	0.53	0.94	0.41 ***	0.00
ln(PRIVATE_TO_PUBLIC_VALUE)	−0.05	0.16	0.21	0.13
ACQUIRER_CAR	4.23	2.93	−1.30	0.22
TARGET_SALES ($mil)	168.49	137.51	−30.98	0.11
TARGET_PATENTS	1.44	1.99	0.55	0.30
HIGH_TECH_TARGET	0.22	0.35	0.13 ***	0.00
ACQUIRER_MARKET_VALUE ($mil)	1,967.24	1,994.67	27.43	0.93
ACQUIRER_CASH_TO_ASSETS	0.14	0.21	0.07 ***	0.00
RELATIVE_SIZE	0.37	0.33	−0.04	0.31
ALL_CASH	0.32	0.27	−0.05	0.20
SAME_STATE	0.15	0.21	0.06	0.10
HORIZONTAL_MERGER	0.37	0.31	−0.06	0.18
STATE_INCOME_GROWTH	1.36	2.20	0.84 ***	0.00

TABLE A9
Likelihood Sellout is Announced in a Non-Deregulated Banking Environment

Coefficients from probit regressions on a sample of 557 acquisitions of private targets by public acquirers. Some observations are dropped from the analysis because the industry dummy perfectly predicts the outcome. The dependent variable is 1 when the sellout occurs in a non-deregulated banking environment (DEREG_STATE×AFTER=0). DEREG_STATE×AFTER is a dummy variable that equals 1 if the target's state has deregulated interstate bank branching laws at the time of the sellout. *t*-statistics (in parentheses) are based on heteroskedasticity-robust standard errors clustered by state. *** and * indicate statistical significance at the 1% and 10% levels, respectively.

	Predict: Sellout Announced in Non-Deregulated Banking Environment	
Window for sellouts	± 3 Years	± 2 Years
	(1)	(2)
ln(TARGET_PATENTS)	0.013	0.017
	(0.148)	(0.160)
TARGET_SALES	−0.000	0.000
	(−0.549)	(0.050)
RELATIVE_SIZE	0.145	0.122
	(0.768)	(0.575)
ALL_CASH	0.192	0.236
	(1.347)	(1.382)
HIGH_TECH_TARGET	−0.322	−0.244
	(−1.485)	(−0.965)
SAME_STATE	−0.293*	−0.170
	(−1.769)	(−0.854)
HORIZONTAL_MERGER	0.029	0.184
	(0.212)	(1.143)
STATE_INCOME_GROWTH	−0.314***	−0.213***
	(−6.420)	(−3.213)
ln(ACQUIRER_MARKET_VALUE)	0.023	−0.016
	(0.348)	(−0.211)
ACQUIRER_CASH_TO_ASSETS	−0.360	−0.532
	(−1.049)	(−1.267)
Constant	3.827	0.234
	(0.028)	(0.351)
Industry Dummies	Yes	Yes
Year Dummies	No	No
State Dummies	No	No
No. of obs.	533	361
Pseudo R^2	0.16	0.10

TABLE A10
Propensity Score Matched Samples

Replications of Tables 4, 5, and 6 in Panels A, B, and C, respectively. The sample includes sellouts announced in a non-deregulated banking environment (DEREG_STATE×AFTER = 0) plus propensity score matched sellouts announced in a deregulated banking environment (DEREG_STATE×AFTER = 1). Propensity score matching (using the command psmatch2 in Stata, written by Edwin Leuven and Barbara Sianesi) is done based on nearest neighbor matching, with replacement, with no restriction on the caliper. The specifications are identical to those in Tables 4, 5, and 6. All regressions include year and industry fixed effects. Only the coefficient on the variable of interest in each regression is reported. ln(DEAL_VALUE_TO_SALES) is the natural logarithm of SDC deal value divided by the target's annual sales. ln(PRIVATE_TO_PUBLIC_VALUE) is the natural logarithm of the deal value-to-sales ratio of the private target divided by the average deal value-to-sales ratio of matched public targets. ACQUIRER_CAR is the cumulative abnormal return of the acquirer over the (-5, +5) day window around the deal announcement. DEREG_STATE×AFTER is a dummy variable that equals 1 if the target's state has deregulated interstate bank branching laws at the time of the sellout. *t*-statistics (in parentheses) are based on robust standard errors clustered by state. *** and ** indicate statistical significance at the 1% and 5% levels, respectively.

Panel A. Replicate Table 4, Dependent Variable is ln(DEAL_VALUE_TO_SALES)

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	0.568***	0.693**	0.715***	0.751***
	(2.993)	(2.585)	(3.003)	(3.490)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	482	482	344	344

Panel B. Replicate Table 5, Dependent Variable is ln(PRIVATE_TO_PUBLIC_VALUE)

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	0.790***	1.127***	1.044***	1.049***
	(2.720)	(3.533)	(4.050)	(4.068)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	380	380	274	274

Panel C. Replicate Table 6, Dependent Variable is ACQUIRER_CAR

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	−1.884	−2.357	−6.187***	−8.122***
	(−0.848)	(−1.050)	(−2.934)	(−3.699)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	482	482	344	344

TABLE A11
Winsorize the Sample at the 10th and 90th Percentiles

Replications of Tables 4, 5, and 6 in Panels A, B, and C, respectively, where variables are winsorized at the 10th and 90th percentiles to mitigate the influence of outliers. Only the coefficient on the variable of interest in each regression is reported. DEREG_STATE×AFTER is a dummy variable that equals 1 if the target's state has deregulated interstate bank branching laws at the time of the sellout. ln(DEAL_VALUE_TO_SALES) is the natural logarithm of SDC deal value divided by the target's annual sales. ln(PRIVATE_TO_PUBLIC_VALUE) is the natural logarithm of the deal value-to-sales ratio of the private target divided by the average deal value-to-sales ratio of matched public targets. ACQUIRER_CAR is the cumulative abnormal return of the acquirer over the (-5, +5) day window around the deal announcement. *t*-statistics (in parentheses) are based on robust standard errors clustered by state. *** and ** indicate statistical significance at the 1% and 5% levels, respectively.

Panel A. Replicate Table 4, Dependent Variable is ln(DEAL_VALUE_TO_SALES)

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	0.427***	0.345**	0.536***	0.478***
	(3.051)	(2.421)	(3.224)	(2.751)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	557	557	383	383

Panel B. Replicate Table 5, Dependent Variable is ln(PRIVATE_TO_PUBLIC_VALUE)

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	0.574**	0.603**	0.599**	0.725***
	(2.323)	(2.174)	(2.468)	(3.487)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	431	431	295	295

Panel C. Replicate Table 6, Dependent Variable is ACQUIRER_CAR

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	−2.732	−2.659	−5.675***	−6.883***
	(−1.480)	(−1.402)	(−3.320)	(−4.863)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	557	557	383	383

TABLE A12
Robustness on Calculation of Acquirer CARs

Replications of Table 6 where regressions are estimated by OLS (rather than WLS) and/or acquirer CARs are calculated over the (−2, +2) day window around the deal announcement. Only the coefficient on the variable of interest in each regression is reported. DEREG_STATE×AFTER is a dummy variable that equals 1 if the target's state has deregulated interstate bank branching laws at the time of the sellout. *t*-statistics (in parentheses) are based on robust standard errors clustered by state. *** and ** indicate statistical significance at the 1% and 5% levels, respectively.

Panel A. Replicate Table 6, Acquirer CAR (−5,+5), Ordinary Least Squares

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	−1.267	−3.521**	−5.617***	−8.866***
	(−0.653)	(−2.032)	(−3.337)	(−5.002)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	557	557	383	383

Panel B. Replicate Table 6, Acquirer CAR (−2,+2), Weighted Least Squares

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	−1.791	−2.004	−3.775**	−4.980***
	(−0.914)	(−1.063)	(−2.268)	(−3.049)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	557	557	383	383

Panel C. Replicate Table 6, Acquirer CAR (−2,+2), Ordinary Least Squares

	(1)	(2)	(3)	(4)
DEREG_STATE×AFTER	−1.287	−1.972	−5.158***	−6.078***
	(−0.724)	(−1.337)	(−3.036)	(−3.378)
Controls, Industry FE, Year FE	Yes	Yes	Yes	Yes
State Fixed Effects	No	Yes	No	Yes
No. of obs.	557	557	383	383

TABLE A13
State Level Univariate Tests

In Panel A a univariate test of the proportion of sellouts is conducted. The proportion of sellouts is calculated as the number of private target sellouts per 100,000 private firms in the state. The number of private firms in each state is calculated by subtracting the number of public firms in Compustat from the number of firms with at least one employee reported by the Census. In the first three rows of Panel A, this number is calculated annually while in the bottom three rows this number is calculated one year before the state responded to IBBEA. In Panel B the state-level mean of ln(DEAL_VALUE_TO_SALES), ln(PRIVATE_TO_PUBLIC_VALUE), and ACQUIRER_CAR is analyzed. The analysis in Panel B includes states with non-missing values both before and after the response to IBBEA. The last column in both panels shows p-values from a test of whether Change is different from zero. *** and ** indicate statistical significance at the 1% and 5% levels, respectively.

Panel A. Mean Proportion of Sellouts to Private Firms in the State

Denominator calculated annually	N	Before	After	Change	p-value
Deregulating States	31	1.40	2.17	0.77***	0.01
Non−Deregulating States	12	0.57	1.70	1.13***	0.01
Difference in Differences				−0.35	0.50
Denominator calculated before response to IBBEA					
Deregulating States	31	1.38	2.24	0.87***	0.01
Non−Deregulating States	12	0.56	1.75	1.18***	0.01
Difference in Differences				−0.32	0.56

Panel B. Dependent Variables, Aggregated at the State Level

ln(DEAL_VALUE_TO_SALES)	N	Before	After	Change	p−value
Deregulating States	24	0.31	0.67	0.36**	0.02
Non−Deregulating States	6	1.11	0.39	−0.73**	0.03
Difference in Differences				1.08***	0.00
ln(PRIVATE_TO_PUBLIC_VALUE)					
Deregulating States	24	−0.13	−0.11	0.01	0.97
Non−Deregulating States	6	−0.25	−0.04	−0.23	0.71
Difference in Differences				0.24	0.58
ACQUIRER_CAR					
Deregulating States	24	5.65	2.35	−3.30***	0.03
Non−Deregulating States	6	3.26	3.80	0.55	0.94
Difference in Differences				−3.84	0.61